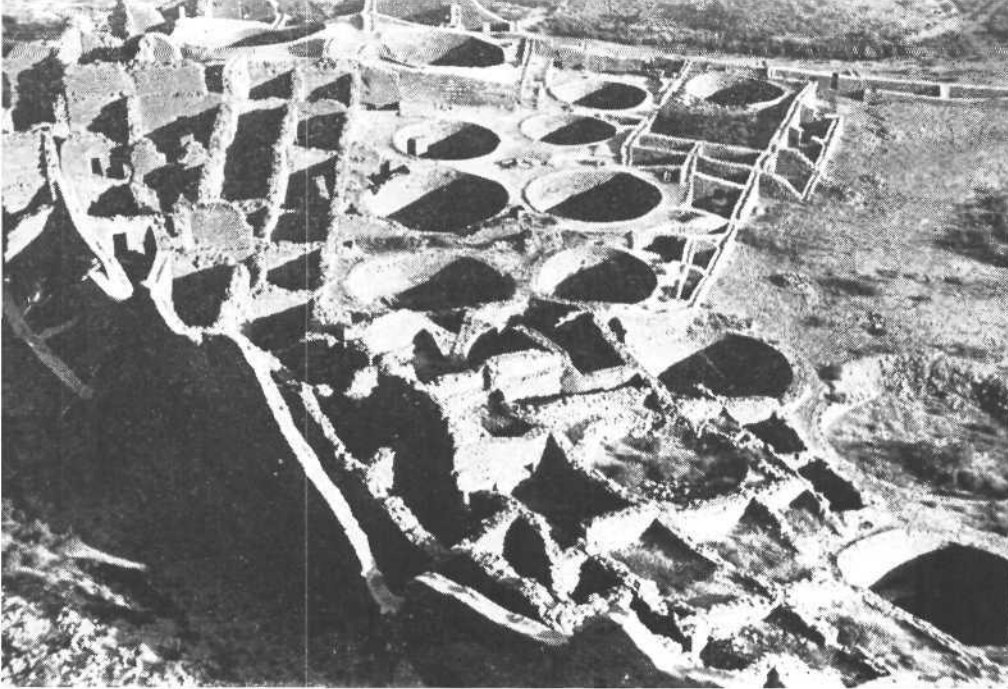


Desert

NOVEMBER, 1952 35 Cents





Pueblo Bonita Ruins in Chaco Canyon. Photo courtesy Charles S. Webber.

WESTERN EYES

By PHYLLIS W. HEALD
Portal, Arizona

It takes Western eyes to understand
The color in our desert land.

Eyes that are calm and willing to spare
Time, for absorbing the beauty there.
The soft grey hue of cactus green,
The wind-blown sand with its golden sheen.

The coppery red of mineralized earth
That forms a background for the birth
Of sagebrush, tinted a silvery blue
And seen for miles in endless view.

The desert willow, the clean mesquite
With lacy branches, standing neat
And holding, as by royal command,
The restless, ever-moving sand.

The graceful yucca, creamy white,
Silhouetted against the night.
Its slender flower, like a rod,
Pointing upward straight to God.

Everyone sees the blue of the skies,
But Desert colors are for Western eyes.

DEATH VALLEY

By LORNA DAWSON
Los Angeles, California

Vast desolation stretching unending;
Oven-hot wastes, mountains unbending.
Part of the world, yet lone No-Man's Land;
Weirdly attractive pilings of sand,
Color bespattered, craggy the heights;
Sun-baked the noontime, moon-drenched the nights.

Stars for the plucking; after the sun
Fades o'er the crests, his thirsty work done.
Life, day's heat shunning, nocturnally wakes,
Lizards and insects, kit-fox and snakes.
Black now the mountains, contours cut clear,
Detailed no longer, awesome and sheer.
At the sun's rising rainbow tints glow;
Peaks stand majestic, capped high with snow.

Eerie, inspiring, deathly serene,
Ageless as time, fantastic as dream.
It will go on, man's span to mock,
This desert eternal, this valley of rock;
But deep in the clefts will re-echo man's cries
Along through the ages, his hopes and his sighs.

And though seeming lifeless 'neath heaven's
arc'd bowl,
The hardships of man will have given it a soul.

THE DESERT

By HELEN BABSON
Los Angeles, California

To him who keeps his soul so small
It cannot see above the wall
That bounds his selfhood's narrow cell,
The desert is a cursed land,
Its endless miles of sunburnt sand
Will seem like searing fires of hell.

But him who dares to free his soul
To seek the meaning of the whole
Of life, whatever its extremes,
The desert draws to her embrace
And spreads her miles of purple space
To make a highway for his dreams.

DESERT OCTOBER

By MAXINE F. MCNEIL
Alamogordo, New Mexico

A haze is on the mesa;
A drowse is on the hill.
The wind forgets its calling,
And the tamarisk is still.

The thunderhead of summer
Fades out upon the peak.
The cottonwood turns paler
Where the rivers softer speak.

The noon's a sunny mocker
Of morning's promised frost.
The horse corral's a daydream,
And the cattle all seem lost.

The canyon trail is bluer;
The rimrock stars are pure.
The skyline's an enchantress,
And the road's a dusty lure.

There's glow instead of glaring;
There's fool's gold on the plains.
For October's in the desert,
And the desert's in my veins.

Attaining

By TANYA SOUTH

Count not the cost and risk you take.
Count but the strides that you can make!
Count but the height that you can climb.
Step over step toward the Sublime!

Attainment is the thing that counts.
And as each one attains and mounts,
He views the cost and risks he sees
As Opportunities.

Deserted Pueblo

By CORNELIUS COLE SMITH
Riverside, California

I must go now to the places where the
sunset
Throws shadows on the high red walls of
rock,
Where starlight falls upon those silent hills,
And sun and moon are calendar and
clock.

I will see the giant cactus spear a passing
cloud,
And rift its fleecy vapor into shreds,
And catch the glint of copper-rock and
moonstones
From their place in empty river beds.

I will walk into some long forgotten town,
See lizards run beneath the stones when
I draw near,
And close my eyes to see a cavalcade of
things,
That vanished in some ageless bygone
year.

I will hold communion with these empty
rooms,
These crumbling walls, this broken shard,
And trade my soul's confusion now
For rest within this sun baked Indian
yard.

VALIANT MOUNTAIN

By ELSIE MCKINNON STRACHAN
Santa Ana, California

With roots embedded deep in centuries past,
Baboquivari, silent, granite-cast,
Towers skyward. Time and wind and rain,
In collusion with the sun, in vain
Have lashed and beaten; graven and proud
she stands
Unmoved, star-high above the desert sands.
At times a lei of snow, flung 'round her
throat,
Adorns her age-long, ever-changing coat—
Now grey, now dusty-rose, now purple hued,
Depending on the hour, and on her mood.
Baboquivari, silent, granite-cast,
Keeping from you and me, secrets of the
past.

REFLECTION

By EVELYN PIEPMEIER ROSS
Kansas City, Missouri

Oh, remember the desert as it looks at night
Warm and soft in the lunar light;
A transparent robe over its thin-spun hair
With clips of stars to hold it there.

No moon is pale in the desert sky
Bright, ice sharp, it mirrors the Arctic eye.

In its path of reflected light—
Cottontails nose about, in spite—of wander-
ing coyotes
And puma paws!
Stealthily the weasel twists to the sheltered
nest,
Robbing eggs and young from the bird's
warm breast—
Awakened by its shaft of dazzling white
The skunk goes forth into the night.
Deer hob down from the lower slope
To vie with the "flash" of the antelope—
While grey shadows discourage their ene-
mies
The pack rats barter for treasures as they
please.

And MAN alone lies down upon his hard-
ened bed
And pulls the patchwork quilt up over his
head!

DESERT CALENDAR

October 31 — Nevada Day, Carson City, Nevada.

October 31-November 2—Helldorado, historical pageant, Tombstone, Arizona.

November 1—All Saints' Procession, Taos Pueblo, Taos, New Mexico. At sunrise.

November 1—Working Cattle Ranch Tour, from Tucson, Arizona.

November 1-2 — Desert Peaks Section, Southern California Chapter, Sierra Club, hike to Eagle Crags and Pilot Knob, Mojave Desert peaks.

November 1-2—Southern California Chapter, Sierra Club rock climb near Joshua Tree, California.

November 1-30—Special Exhibit of Indian portraits and scenes by Artist Clarence Ellsworth. Continuation of Special Exhibit of American Indian handicraft from collection of the late Kathryn W. Leighton and examples of Mrs. Leighton's Indian portraits. Southwest Museum, Highland Park, Los Angeles, California.

November 2—Mesilla Valley Pecan Festival, Las Cruces, New Mexico.

November 6-8—First Annual Mineral Conference (International Mining Days), Albuquerque, New Mexico.

November 7-16—Arizona State Fair, Phoenix, Arizona.

November 8-9 — Colorado River Roundup, Parker, Arizona.

November 10-11 — Annual Cattle show and sale, Raton, New Mexico.

November 14-16—Goodwill tour to Guaymas, Mexico, from Tucson, Arizona.

November 15-19 — Livestock show, Ogden, Utah.

November 21-23—Riverside Chapter, Sierra Club of Southern California trip to San Felipe, Baja California.

November 27-30—Southern California Chapter, Sierra Club trip to Death Valley.

November 27-30—Desert Peaks Section, Southern California Chapter, Sierra Club exploratory trip to Coxcomb Mountains, California.

November 29-30—Old Tucson Daze, Tucson Mountain Park, Tucson, Arizona.

November 29-30—Riverside Chapter, Sierra Club of Southern California trip to Corn Springs, Chuckawalla Mountains, California.



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White Oaks cemetery, with a few buildings of the old ghost town visible in the distance.

Ghost of Baxter Mountain

By NELL MURBARGER
Photographs by the Author
Map by Norton Allen

IF IT hadn't been for Susan MacSween, this story might never have been written.

It all started in the Ruidoso country of New Mexico, when Mother and Dad and I were collecting notes on the Lincoln County War which had ravaged that section 75 years earlier. Talking with old timers, we heard frequent mention of Susan's name, and we gathered that she had been the heroine of that local conflict.

When we learned that Susan had survived the war by half a century, had lived to become famous as the cattle queen of New Mexico and had passed her declining years in the ghost town of White Oaks, we resolved to visit this lonely old mining camp in the mountains of Lincoln county. Possibly we could find someone who had known her; or, at least, we thought, we might visit her grave.

Leaving the little town of Lincoln, where Billy the Kid and his hard-riding contemporaries still seem real and close, we headed out the canyon road leading to the west. It was early October. Wild walnut trees, hanging over the thin trickle of the Rio Bonito, were already flecked with gold by the

Nell Murbarger met Dave Jackson in a ghost town cemetery, by the weed-choked graves of some of New Mexico's most colorful early inhabitants. Dave is one of the few remaining residents of White Oaks, near Baxter Mountain in central New Mexico, and he remembers when the town was a bustling mining camp producing rich values in gold. Pieced together from Dave's memory, his files of old newspapers, letters, mining reports and maps, here is the story of a town which couldn't survive without the railroad that no one would build.

frosty nights of a week past; but the tawny dry hills, rolling back from the road, lay warm and sleepy under the bright sun of mid-morning.

Thirty-three miles of upland desert and juniper-capped ridges brought us to Carrizozo, at the eastern edge of the *malpais*. Turning northward, we began skirting the fringe of this sullen, barren waste, and it was easy to understand why early Spanish explorers had termed it "bad country." Eons before, this high desert valley had been flooded by a fiery, liquid torrent, 50 miles in length—and now, every wavelet and whirlpool of that molten flow is forever preserved in coal black stone that envelops the earth like a heavy shawl.

Three miles out of Carrizozo, we turned off the highway and, leaving the *malpais* behind, headed east on a primitive desert road. Crossing a yucca-grown flat, at an elevation of more than a mile above sea-level, we soon were climbing toward the mouth

of a deep V-shaped canyon in the dark range of the Sacramentos.

The road became rougher and rockier, the canyon deeper. Scrub oak and pinyon pines appeared among the junipers, and flanking hills began showing the scars of abandoned mine dumps and prospect holes. It was about eight miles from the turn-off that we topped a rise and found spread before us a huge old cemetery. Half a mile farther up the road, we could glimpse the gaunt stone buildings of White Oaks.

For all its former fame and opulence, the White Oaks cemetery might serve as a type specimen for all the ghost town graveyards of Creation—a few family plots, encircled by grim iron fences; a few engraved slabs of marble and granite; lonely mounds heaped with broken stone, splintered palings fallen in the weeds, graves without markers, markers without names—and thistles without end.

Pausing to scan every inscription, however faint, we picked our way through the old burial ground. It never occurred to us that we might not be alone in the cemetery until we were startled by the snapping of a twig. Glancing up, we saw approaching us a small man, sun-tarnished and brown-eyed.

"Huntin' somebody?" His face crinkled in an impish grin.

Dad said we had hoped to find the grave of Susan MacSween—"if she's buried here."

"Indeed, now, she is!" exclaimed the old man. "Right over yonder a little piece. You kinfolks of hers?"

When we explained that our interest in the late Susan was purely academic, and that we were chiefly on the prowl for *Desert Magazine* stories, our host introduced himself as Dave Jackson. He said he had followed mining in this vicinity for 55 years, having located at White Oaks in 1897 when the place was booming. He had remained to see it decline and die



Above—Copy of the *Old Abe Eagle*, March 9, 1893, from Dave Jackson's files of early White Oaks newspapers. The editorial "ear" to the right of the masthead reads: "Keep Your Eye on White Oaks, the objective point of all future railways to New Mexico." But the railroads snubbed the booming mine camp, and after 20 years of inadequate transportation, the town became a ghost.

Left—Dave Jackson, one of the few remaining residents of White Oaks, at the grave of Susan MacSween Barber, heroine of the Lincoln County War and later the cattle queen of New Mexico.

until he was left as one of the last survivors of the old ghost town. Now, in addition to his mining, he does what he can to take care of the cemetery.

"No money in it," he admitted, "but thunderation! Most all the folks planted here were personal friends of mine . . . and somebody has to look

after 'em! Come on. I'll show you Susan's grave."

After we had made proper inspection of the last resting place of Susan MacSween Barber—she had remarried, explained Dave, after her first husband was killed in the Lincoln County War—we wandered back to the entrance of the cemetery and sat down on the rocky ground. With October's sun warm and comfortable on our backs, this man who had been a part of White Oaks for more than half a century sketched for us the biography of the town—its conception and birth, its fabulous riches, the heartbreaking wait for a railroad that never came, and finally, the Exodus.

The original discovery of gold in the White Oaks district was made by John J. Baxter, a Missouri prospector who had arrived in Lincoln county with a pair of burros in 1878. The mountain on which his discovery was made became known as Baxter Mountain, and the cluster of miners' tents which gradually accumulated in the canyon was designated "White Oaks Camp."

At first, White Oaks was only a mediocre placer operation. Water required for "rocking out" the gold had to be carried into the gulches on burro back, and a miner whose clean-up yielded three dollars a day considered that he was doing as well as anybody. Of course there were compensations.

In the surrounding hills there was an abundance of game, including bear, deer and wild turkeys, and the climate was good. For a man with no great passion for riches, it was a pleasant place to camp—so long as he did not become involved in the Lincoln County War, then swinging into stride on the other side of the range.

Concerning the discovery which was to put White Oaks on the mining map of the world, there are several conflicting stories. The most publicized version follows:

Into Baxter's camp, in the late summer of 1879, there wandered a traveler known as Tom Wilson, assertedly a fugitive from the law of Texas. Hoping to sight a feasible route for his next day's travel through the *malpais*, Wilson started up Baxter Mountain about sundown, leaving camp with the jocular remark that he might "find a gold mine."

Part way to the summit, so the story goes, Wilson paused for a moment to catch his breath. As he sat resting, he pecked idly at an exposed ledge, and upon rising to resume his climb, dropped a few of the rock slivers into his pocket.

Anyone familiar with the traditional tale of famous mines discovered by accident should be able to take the story from there. Upon Wilson's return to camp, Baxter asked if he had found his gold mine. Wilson dropped

the samples in Baxter's hand. Baxter let out a whoop. This was it! The richest ore in New Mexico! The first lode gold in the district!

Although by then it was pitch dark, Baxter insisted upon staking the claim that night. With a coal oil lantern to light their way, the men started back up the mountain to the rich outcropping. Accompanying the pair on this expedition was one Jack Winters. Accounts differ as to whether he was a partner of Baxter, a friend of Wilson, or just a kibitzing passer-by. Whatever his connection, he proceeded to deal himself in.

When it came to staking the claim he had discovered, Wilson refused to take any part of it, declaring that he had no use for gold. Incredible as this must have seemed to Baxter and Winters, they acceded to his wishes. When Wilson took his departure the following morning, he was richer by nine dollars in cash and a good pistol given him by the two miners as token payment for services rendered. It was small enough reward for a discovery which assertedly developed into the North and South Homestakes, two of the greatest producers in the history of White Oaks.

Close on the heels of Wilson's strike came discovery of the fabulous Old Abe—a mine slated to yield more than \$3,000,000 in its day—and with that development the stampede to White Oaks was officially launched. Not only was the rush marked by the usual excitement, free and easy money, frontier exuberance and hard characters common to all boom camps, but here in White Oaks were the additional pot-boilers of political upheaval and geographical immensity.

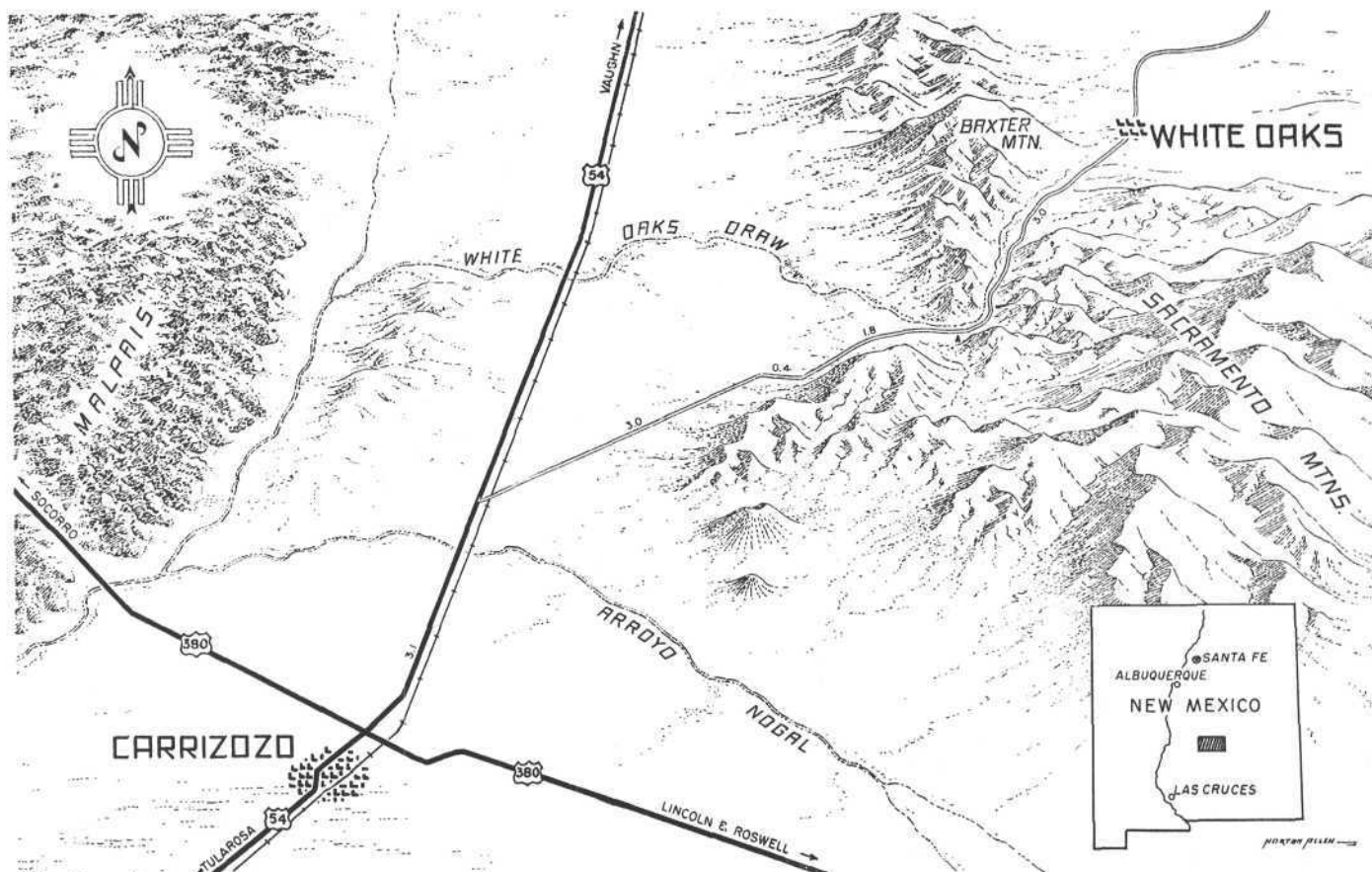
Lincoln county in those days was a wild and lawless realm, its 27,000 square miles of territory being slightly less than the state of New York. With an almost total lack of transportation, communication facilities, roads and law enforcement officers, it formed perfect sanctuary for gunmen fleeing the bullets of Texas lawmen and Mexican *rurales*, and many such desperadoes had come to dwell within its borders. It is easy to understand how the Lincoln County War started. On every side of White Oaks, hard riding, fast shooting men were exterminating one another in bitter civil strife.

And, as if this were not enough, to the seething devil's brew was added a gold stampede with ore running thousands of dollars to the ton!

One of the first effects of the gold rush was wild speculation in real estate, with fantastic prices demanded—and paid—for building lots in the business section of the newly-surveyed

Author examining lava swirls in the malpais or bad country west of White Oaks.





townsite. But in spite of the premium on land, the town grew rapidly.

Daily mail service was inaugurated between White Oaks and Socorro in October, 1880. Two months later, the first inkwet copies of the White Oaks *Golden Era* were snatched from the press by a news-hungry crowd. With the opening of Starr's Opera House, all miners in the district declared a holiday, and Mitchell's Dramatic Troupe played the opening engagement to a capacity house. Names of doctors and of lawyers—among them Bill McDonald, first governor of New Mexico, and Emerson Hough, later the author of many western novels—appeared on second floor windows; lodges were organized, a school established. Money flowed like water through the banks, and important mining tycoons and glib-talking promoters thronged the hotel lobbies.

In short, White Oaks had all the appurtenances of an up-to-date city—with one exception: Accessibility.

It did not matter that this was the heyday of the empire builders, that titans of transportation were growing opulent, and pine ties and steel rails were spider-webbing across the land in every direction. White Oaks still was dependent upon saddlehorses and stage coaches, upon buckboards and mule-drawn freight wagons and ox teams.

Coincident with her gold development, important coal deposits had been discovered at The Oaks; but for

all its local value, their product might as well have been the black rock of the *malpais*. Every lump of coal shipped to an outside market, every pound of ore taken from White Oaks' mines faced the almost prohibitive expense of being wagon-freighted to El Paso, 140 miles to the south, or across the *malpais* to the Santa Fe connection near Socorro, 100 miles to the west. Hundreds of tons of supplies, and building materials almost without end had been freighted from Las Vegas, 150 miles to the north.

Even as early as 1881 the Santa Fe Railroad had considered the construction of a branch line from San Antonio, New Mexico, to White Oaks, but had discarded the idea as impractical. With every new proposal, every rumor of a projected railroad, hopes would bloom anew and stockpiling of ore would be vigorously pushed. Of all the grandiloquent plans that momentarily buoyed the hopes of White Oaks, few progressed beyond the point of franchises and optimistic editorials in local newspapers.

There was the White Oaks & Kansas City railroad, the Clayton, White Oaks & Pacific railroad and half a dozen more, until the *Old Abe Eagle*, in its issue of March 19, 1893, took occasion to remark: "Quite a number of new railroads are being built into White Oaks just now—on paper . . . They say the Denver managers of the D. & E. P. Ry. are 'saying nothing, but are sawing wood.' Must have

enough sawed by this time to supply the road with fuel for a year or two—when they get it in operation."

Morris R. Locke and associates, in 1889, had begun actual construction of a railroad from El Paso to White Oaks. After laying ten miles of track, grading the roadbed for another ten miles and investing \$170,000 in the venture, the company had given a last futile gasp and slid into bankruptcy. When George Jay Gould, greatest railroad financier of his day, purchased assets of the defunct company for \$50,000, all White Oaks rejoiced. With Gould's millions backing the road, it was declared, construction would be rushed to completion; and given the accessibility afforded by a railroad, nothing could stay the progress of the town!

But even multi-millionaires make mistakes. After thorough investigation of the property, Jay Gould declared the road infeasible, washed his hands of the whole affair and wrote off his loss as a bad guess.

And then came Charles B. Eddy. Fine man, Eddy, said White Oaks. Wonderful connections. Plenty of Eastern capital. If Charles B. Eddy undertook to build a railroad to White Oaks—he would build it!

Incorporated in 1897 as the El Paso and Northeastern, work began at once. Hundreds of men and teams soon were grading and laying track. By the summer of 1899, Eddy's road had been completed to White Oaks

Junction — only an hour's travel by team and wagon from the mining camp farther up the canyon—and the city fathers were perfecting plans to welcome the road's arrival with stirring band music and patriotic oratory.

There was only one fly in the ointment — an annoying and persistent rumor that the road would never be continued on to White Oaks, but would veer off toward Capitan, where Eddy was heavily interested in the Salado coal field.

Seeking to forestall any such digression, White Oaks' 2000 citizens proffered a juicy subsidy. Were the line completed to White Oaks, as originally scheduled, the town agreed to give the company 40 acres of land for terminals, nine miles of cost-free right-of-way, and an outright payment of \$50,000 in cash.

But Charles B. Eddy was no longer interested in White Oaks, its potentialities, or its subsidies. The line never came any closer.

After fighting for 20 years for a railroad, only to have it snatched from their grasp when five or six miles from the heart of town, the people of White Oaks began to wonder. Why had Eddy deserted White Oaks? Could it be that the camp was through, washed up, and Eddy knew it? It was not a reassuring thought; but try as a man would to put it out of his mind, it still nagged. Maybe it would be better to take a small loss and "get out from under" than to hang on and wait for the bust-up.

And so the exodus began. Mines began closing. Merchants sold their stores and shops. Laboring men and their families moved to more promising districts. Buildings fell into disrepair.

The town deteriorated rapidly — although not nearly so fast as it had grown, 20 years before. Soon all that remained was a handful of its staunchest supporters — among them, our chance-met friend of the cemetery, Dave Jackson.

"I don't know," he reminisced. "Maybe we expected the old camp to come back—maybe we just liked it as a place to live."

Leaving the cemetery, we proceeded on up town, there to wander through the deserted streets and try to recapture the scene as Dave pictured it for us. Our way took us past the Hewitt block, a splendid structure of beautifully-dressed stone. Not far distant stood another two-story building which formerly had housed the postoffice. Elsewhere over the townsite were scattered a number of smaller stone structures, a few crumbling adobes, some frame buildings with false fronts. Across the ravine stood a fine large

schoolhouse, but its play yard was choked with weeds, and many a year had passed since its bell had summoned classes.

In the entire town there was not one operative business house, save a little fourth-class postoffice that still served the few remaining residents and nearby ranchers.

Somewhere along this deserted street once had stood the Little Casino where "Madame Varnish" had dealt faro and practiced the slick ways that inspired her nickname. Here Billy the Kid had swaggered. The lanky sheriff, Pat Garrett, had pursued criminals and made campaign speeches, and all the griefs and triumphs of life had been experienced.

And now, only emptiness and loneliness and a great and abiding peace remained.

Our introduction to White Oaks had taken place in the autumn of 1950. One year later, in October, 1951, we were again in Carrizozo; and because we felt a strange sort of pull toward the old ghost town in the mountains, we once more set forth on the rocky road to White Oaks.

We found Dave Jackson still busy enough for any two men. He appeared not a day older; his infectious grin still was as good as a tonic, and the little cabin where he and Mrs. Jackson have lived for so many years, was still spotlessly clean and welling with hospitality. All this was the way we had remembered it; the way we had hoped to find it.

Elsewhere in the town, however, big changes were taking place. Where the handsome Hewitt Block had stood a year before, now remained only shattered stone and broken plaster. The wrecking crew was already eying its next target, a short distance down the street.

All building stone and brick and salvagable timbers were being taken to a ranch near Tularosa for re-use, explained our friend Dave.

"Yep," he said, "they're pulling the foundations right out from under us—but there are a few of us who'll stick to White Oaks as long as there's a foot of ground for us to stand on!"

Heading back toward Carrizozo in the late afternoon, we left Dave Jackson standing in the yard of his little home, his gaze fixed on the street above where a stout old stone wall was reluctantly yielding to the battering of human termites. At least, he appeared to be looking at the wall—but I'm inclined to believe that he was looking a long way beyond it; beyond even the wrecking crew.

I'd like to think that once again he was seeing that street when its buildings were new and splendid; when

there was Big Talk of a railroad soon to come, and even the lowliest miner trod the sidewalks with gold in his pocket and his head in the clouds.

Hard Rock Shorty of Death Valley



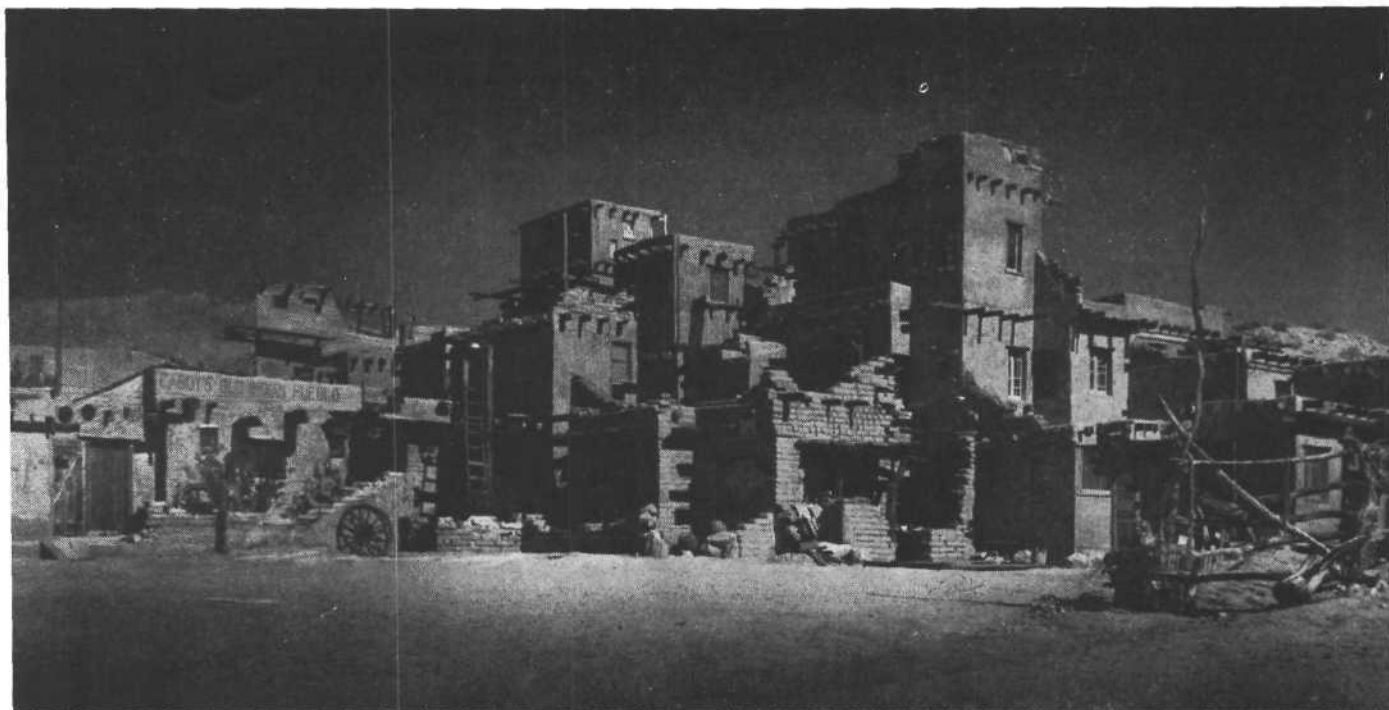
"Nope! I ain't never heerd of no pizen springs in Death Valley," Hard Rock Shorty was telling the visitor who had stopped for gas at Inferno store, "but they's some mineral springs down in the south end o' the valley.

"One o' them springs has soda water jes like you buy in bottles, only it don't have none o' that fancy flavorin'. Then they's another spring that smells like ammonia, and it freezes everything yu put in it. They's some salt springs where the water tastes like it cum from the ocean, an' hot springs where yu can boil eggs.

"But the spring yu want to keep away from is that alum spring over in the Panamints. That water really is bad. None o' the wild animals'll drink it. I lost a good team o' mules on account o' that spring. That was back in '96 when I wuz freightin' fer one of the borax outfits.

"Work got a little slack so I took one o' my teams and drove my buckboard up into the Panamints fer a few days o' prospectin'. Camped by a little spring an' watered my mules that night. An' the next morning all I had in place o' them mules wuz a couple of shriveled up jugheads about the size o' burros.

"I wuz sittin' there on a rock tryin' to figger out how them moth-eaten burros got substituted fer my good team o' mules when another prospector come along and warned me: 'Don't drink none o' that water,' he sez. 'It's alum water — shrivels up everything what drinks it. Few drinks o' that water an' them burros yu got over there'd be no bigger'n jackrabbits.'"



Cabot Yerxa's Old Indian Pueblo in Desert Hot Springs, California. The sprawling many-tiered structure is naturally air conditioned by a unique system of vents and shafts built into the walls.

Cabot Yerxa's Crazy House

By GEORGE M. ROY

Photos by Field Studios, Riverside

OPINION IS sharply divided as to the merits of his project, but upon one point everyone is fully agreed: Cabot Yerxa's Old Indian Pueblo is like nothing else ever seen in the desert country.

This four-story, 31-room Hopi style structure — with no two rooms on quite the same floor level—lies at the mouth of a little desert canyon, bridging the dry streambed and sprawling up both sides of the canyon walls. It is located on the extreme outskirts of Desert Hot Springs, a small health resort on the Colorado Desert a few miles north of Palm Springs, California.

The first reaction upon viewing the startling accumulation of rooms, wings and stories is one of utter amazement. It is an incredible structure. "Now I've seen everything!" is the usual comment.

Its creator, Cabot Yerxa, smiles tolerantly at unkind remarks frequently overheard, and his face lights up with pleasure when someone shows an interest in his self-appointed project. Nearing 70, he has devoted the past ten years to building his Pueblo, and he estimates it will require another ten years to complete it. He plans with the zest of youth, enjoys tolerable

Salvage, hard work and dreams—those are the ingredients of Cabot Yerxa's Old Indian Pueblo at Desert Hot Springs, California. The pueblo is a fantastic accumulation of old railroad ties, discarded telegraph poles, planks from deserted homestead shacks and logs retrieved from flooded canyon streams—held together with cement, adobe and thousands of straightened out second-hand nails. Here is the story of a unique construction project and of the man who made a dream come true.

health, has abundant energy, keeps physically and mentally busy for long hours each day and knows the thrill of achievement.

A large part of the ground portion of the Pueblo is of adobe—solid, substantial, blending into the desert landscape with admirable grace. He has made skillful use of outside plaster to give the 'dobe walls an ancient look. But by far the greater portion of his structure is of frame stucco construction.

For ten years Cabot has been scouring the desert for aged timbers and boards. When the Metropolitan Aqueduct was tunneled through the adjacent moun-

tain ranges, temporary shacks were erected to house the workmen. All the re-useable material from these found its way—board by board and load by load in an ancient Model T Ford — to the Yerxa project. Telegraph poles from the old Los Angeles to Yuma line, railroad ties from the route abandoned when the Salton Sea flooded and inundated portions of the roadbed or from more recent replacement projects along the line, logs washed down from the slopes of Mt. San Jacinto in summer cloudbursts—all these and innumerable other salvage activities contributed richly to Operation Pueblo. Thousands of bent nails from demolished shacks were carefully straightened to hold boards together.

Wherever possible, Cabot found old, well-aged lumber for his building. When it was necessary to use new lumber, he stained it to make it appear old and seasoned. With telegraph poles for rafters and floor joists and railroad ties for wall studs, the structure will stand a long while, and it is reasonably earthquake proof. Outside walls have been stuccoed, some with only a preliminary coat, others with two coats, an occasional one is smoothly finished. The total outside impression suggests that a hundred or more plasterers suddenly

stopped work to retire to their dinner pails.

But the huge ungainly structure's really unique and notable feature is its wholly natural air conditioning. No unsightly desert coolers swarm about the various roofs. No expensive refrigeration units are required. By a unique system of vents and shafts built into the walls—and looking like unfinished corners or missing boards—there is maintained throughout the Pueblo a constant, even temperature. There isn't a single cubicle in all that sturdy pile that isn't delightfully cool even on the hottest desert day.

That Yerxa should have turned to the Indian motif for his private castle is understandable. He was born in Sioux country, the first white child in all that part of North Dakota. His father was an Indian trader, and the

little trading post was the only building in an endless expanse of prairie 16 miles south of the Canadian border. As a small child, Cabot used to see and talk to Sitting Bull, Short Bull, American Horse and other famous chiefs. Cabot never forgot the Indians.

When he was 16 years old, Cabot ran away from home. He became involved in the Alaska gold rush and for two years drove a dog team at Cape Nome, later a four-horse stage from Cape Nome to Teller. For several months he lived among the Eskimos and learned to speak their language. Like the Indians, he ate seal blubber to survive.

In 1895, he spent three magic days in the famed castle of Chapultepec as the guest of Mexico's President Porfirio Diaz. He served for a time as postmaster of Sierra Madre, Cali-

fornia, under appointment of Theodore Roosevelt, was a deputy sheriff in Idaho and a reporter on a California newspaper.

With his family, Yerxa settled in California in 1902. He took a position as under-secretary to Henry Huntington, the railroad tycoon, but soon tired of clerical work and decided to become a painter. In 1905 he was studying art in Los Angeles' first art school—with Hanson Putoff, Anthony Anderson and others in a class of five. Then he went to Europe for a year. With a 20-pound pack on his back, he walked across England, Ireland and Wales, the Isles of Guernsey and Jersey. He studied art in Paris at the Julianne Art School.

In 1912, the Yerxa family bought a California orange ranch at Arlington, near Riverside. That winter, one of the most severe in Southern California, the oranges were wiped out by frost, and with them the Yerxa fortune of approximately \$80,000. Cabot went to work digging ditches with Mexican and Negro laborers for 25 cents an hour. Finding no satisfaction in this job, he drifted to the desert country and, in October 1913, filed on 160 acres of raw desert land near what later was to become Desert Hot Springs. In 100,000 acres of arid country there were perhaps a dozen families at that time.

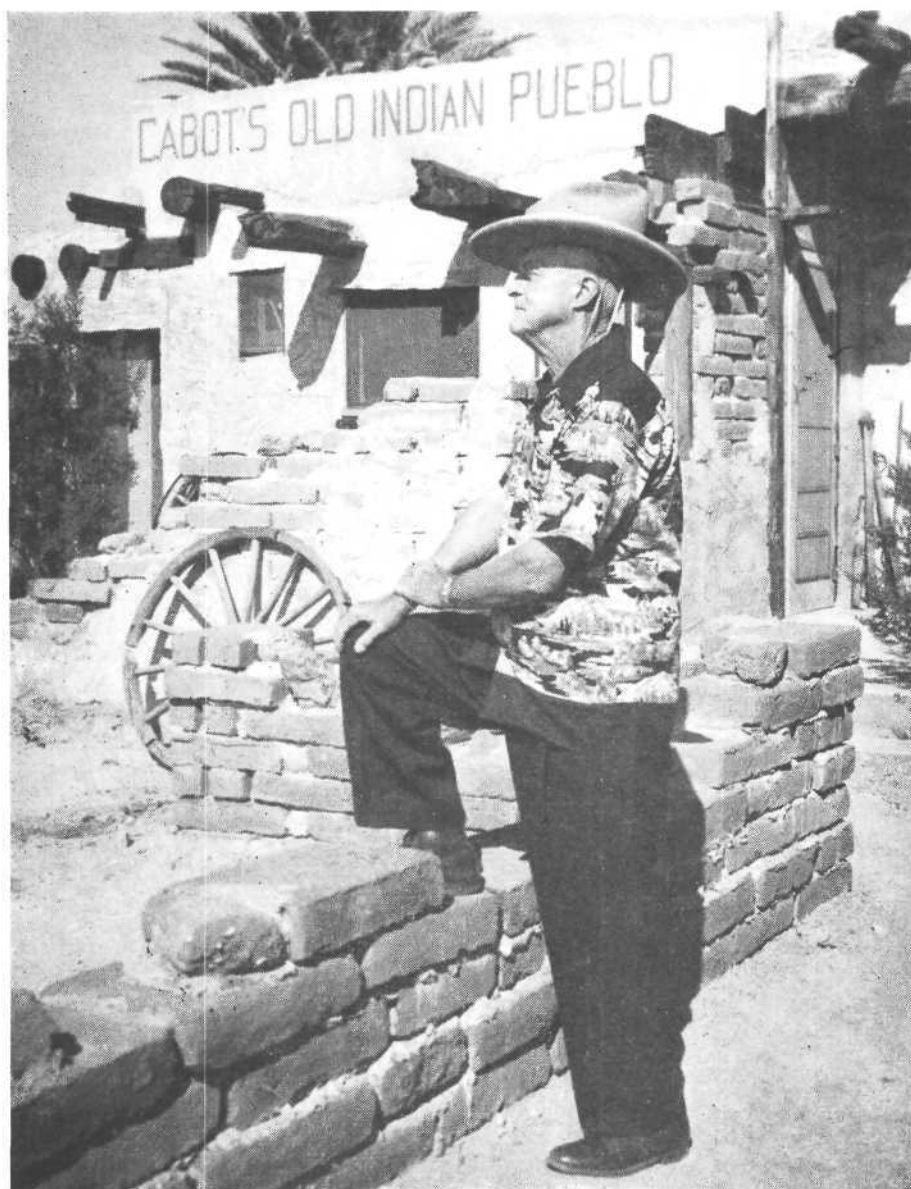
Cabot chose a low desert hill for his home. He built a 10x12 foot stone house which he dubbed "Eagle's Nest." It still is standing—the first permanent house north of the railroad.

The hill he named "Miracle Hill," for it contained both desert sand and fine agricultural soil and red and blue clay. Later it was discovered that on one side of the hill was hot water, on the other side, cold water.

At first Cabot hauled water from Garnet, seven miles away. Cement and other building materials he also carried by back pack and then on a burro named "Merry Christmas." With one round trip a day, seven miles each way, it took him all winter to build his home. Tired of hauling water, he dug a well near his place, and when he brought it in he found the water to be 127 degrees. He named it Discovery Well, and it was the beginning of what now is the health resort of Desert Hot Springs.

Visiting one day in Palm Springs with Carl Eytel, early desert painter, Yerxa was told by an Indian where to find good water close to his cabin. He went home and discovered an old Indian well at the foot of the hill. Its depression still is visible beside the road. The Cahuilla Indians, instead of digging a shaft and lowering a

Cabot Yerxa has been ten years building his pueblo castle in a desert canyon near Palm Springs, California. He estimates it will be another decade before it is finished.



bucket to water, built a ramp so they might walk down with their ollas and fill them at the water's edge. This is the only known authentic Indian well on the north side of Coachella valley.

World War I came and he enlisted in the army. Upon his discharge, he returned to the desert country and bought a store and postoffice at Fertilla, a little town on the Palo Verde mesa northwest of Blythe, California.

In 1941 Cabot returned to Desert Hot Springs and commenced the building of his pueblo. He planned something that would attract the tourists who were flocking to the desert in increasing numbers. He had sold his original homestead and had purchased some acreage nearby. He decided on the Hopi architectural style and began foraging for building materials. The occasional sale of a painting bought nails and cement.

With the exception of one old friend who occasionally lends a hand to help with the heavy work, Cabot has built his Pueblo by himself. In it he has a small gallery where hang his canvases and those of other artists. There also is a small room where picture postcards and other souvenirs are for sale and where visitors may register. For a small fee, Yerxa personally conducts his visitors through the unique structure.

The old homesteader is getting a kick out of life. He is happy and contented. Life is full. Strangers flock to his Pueblo, and he delights in spinning yarns for their entertainment. Whether they deride or envy him, all are welcome. By his side is his gracious wife. Mrs. Yerxa is an accomplished musician who won acclaim on concert stage and lecture platform before coming to the desert.

Together the Yerxas face the future. They have found serenity and peace, two vital ingredients of life sorely needed in a restless world. And now the tourists are providing a comfortable living.

TWO NAMES DESCRIBE ARIZONA-MEXICO VALLEY

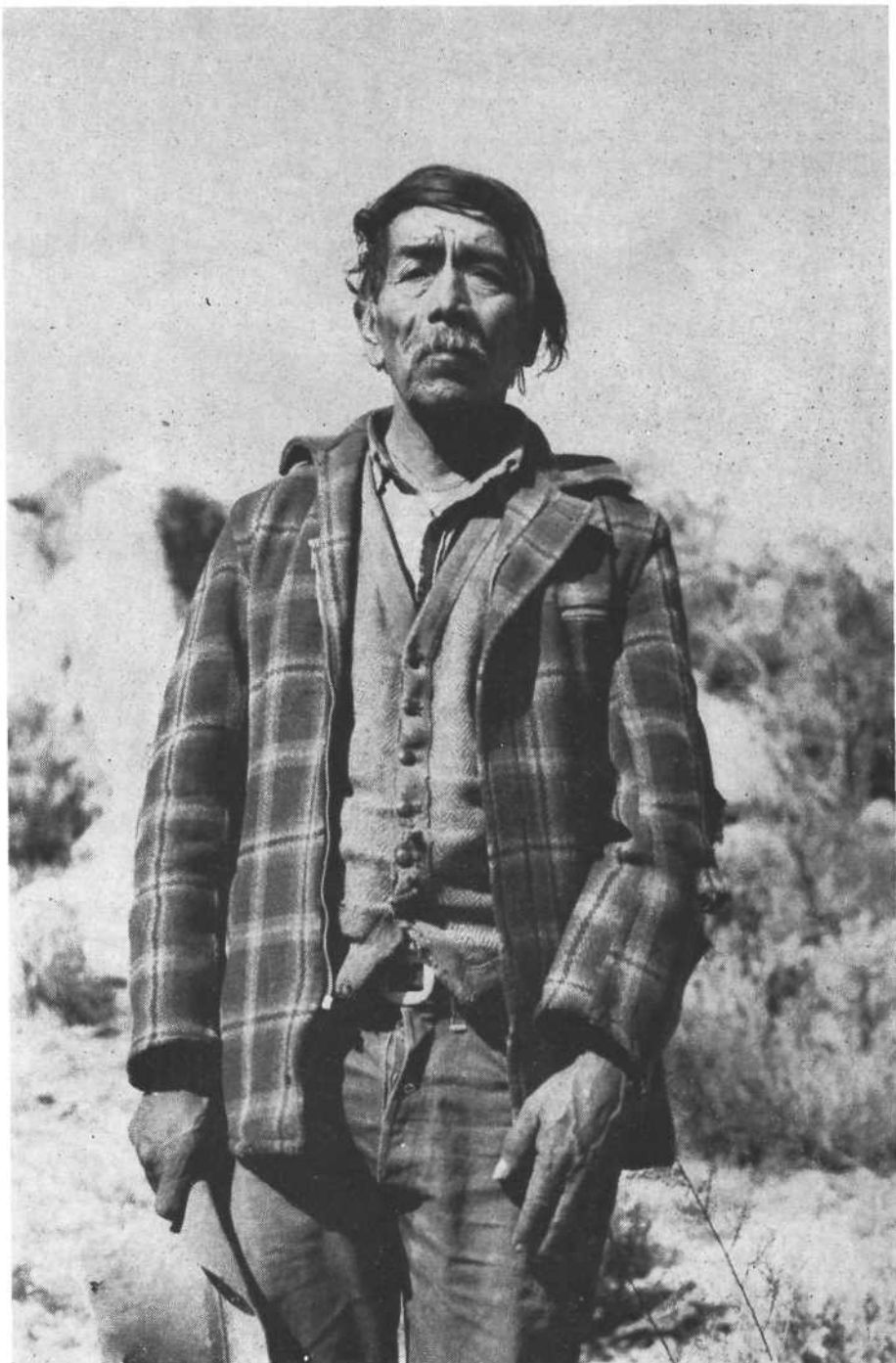
U. S. Government surveyors discovered in 1934 that maps gave two names for the valley in Pima County, Arizona, which the Papagos called *Avra*, or "Big Plain." *Avra* was used on some maps, and *Altar* on others.

It was decided to keep the old Indian name for the Arizona valley that drains to the north. Waters from this area eventually flow into the Gila River. *Altar Valley* now describes the southern part of the area, from which waters drain southwest, eventually reaching the Gulf of California.—*Arizona Republic*.

Lost Silver Ledge of Santa Catarina

By RANDALL HENDERSON

"WHEN THE sun shines directly through the east portal of the mission courtyard, then the silver mine of the Dominican padres will be found on the sidewall of a narrow canyon directly beneath where the sun rests in the sky, about six leagues from the mission."



Eugene Albanes, Diegueno Indian who married a Pai Pai woman and became a member of the latter tribe. He believes that somewhere to the east of the old mission is a rich silver vein—but he is too old to look for it.

This directive, originally translated from the language of the Pai Pai Indians in Baja California, is very explicit as to the location of one of the most baffling of the lost mines on the Lower California peninsula. But despite this and other clues to the location of the mine, said to have been worked in the early 1800s by Indian neophytes under the direction of Catholic fathers at Santa Catarina mission, the rich silver mine today remains a lost treasure.

It was Eugene Albanes, 70-year-old Diegueno Indian, who first told me about the lost silver of Santa Catarina. Eugene married a Pai Pai woman many years ago, and has lived so long at the little thatched Indian village at Santa Catarina he is now regarded as a Pai Pai.

The mission, or what is left of it, is located on the rolling plateau-like top of the Sierra Juarez 115 miles south of the California border.

Eugene and I were upon the hill where the mission had been constructed. All that remains of it today are the low ridges of earth and decomposed bricks which mark the lines where the walls once stood. In excavating near this site recently, the Indians uncovered the remains of an old kiln where it is believed that the Dominican frailes Tomas Caldellon and Jose Llorente, who established this mission in 1797, had fired the bricks used in their construction.

"Maybe also, they brought silver here from the mine," said Eugene Albanes. As he mentioned the mine he nodded toward the rim of the mountains several miles to the east.

Eugene spoke better Spanish than English, and with my companion, Arles Adams, as interpreter, I questioned the Indian more closely regarding the silver mine. It was then that he walked to the site of the mission enclosure and indicated the point where it is believed the eastern portal of the courtyard was located. Aged Indians of the tribe remember when some of the walls were still standing, and I have every reason to believe Eugene was telling the truth when he stepped through an imaginary doorway, and turned facing the east and said:

"When the sun came here, then the mine was over there," and he extended his arm toward the east to the position where the sun would have been to cast its rays through the doorway which once stood where he indicated.

Eugene was sure the mine was there, but he explained that he was too old to look for it. "*Malpais*, bad

country," he remarked, as he looked across toward the rugged eastern rim of the Sierra Juarez.

"One time," he went on, "a Mexican boy herding cows saw through the brush the opening of a cave. But when he tried to enter he found the opening closed with *mucho madero*—thick timbers. He could not enter.

"Later he told me about this experience, and I asked him to take me to the place. But we could not find it, and later he moved away with his parents. No one has ever found the silver mine."

The last of the Santa Catarina missionaries were driven away and the church destroyed by the Indians in 1840. The story which the Indian tribesmen have passed down from generation to generation is that the silver ledge was discovered by one of the Mexican soldiers stationed here as an escort for the padres on their trips to outlying settlements of the natives. This Mexican had worked in the mines in other parts of Mexico and when he was sent to Santa Catarina he spent all his leisure time prospecting over the hills in that area.

The silver deposit which he discovered showed a very high percent-

age of metal, and it is believed that some of it was smelted by crude methods at the brick kiln near the mission. Some of the plate and candlesticks used at the altar were said to have been made of it, and at least two burro-loads were shipped across the gulf to be forwarded to Spain.

While considerable gold was mined at Alamo, 16 miles away from Santa Catarina to the west, the legendary silver deposit is the only important strike of silver ever reported in this area.

Eugene Albanes believes the silver is there, a fabulous amount of it. But he is too old to look for it, and the other Indians in the little settlement either are skeptical or they do not feel that they have much need for it. After all, one eats corn and squash and beef—not silver. And generally there is an ample supply of food in this remote desert community.

ONLY BUILDING DESTROYED

Fire has destroyed virtually the only building ever owned by the primitive Seri Indians of Mexico. The tribe's fish cooperative building, erected in 1940, was razed this summer when a gas stove exploded. American Quakers are collecting funds to replace it.

Cash Prizes for Photographs

With fluffy clouds marching across the sky, and the proper filter, almost any subject can be made glamorous by a photographer who knows the elementary rules of good composition. While the desert is noted for its sunshine, it also has many days in the fall and winter season when the clouds are just right for exceptional pictures in both black and white, and color. All photographers, both amateur and professional, are invited to submit their best black and white prints in the Picture-of-the-Month contest conducted by the staff of *Desert Magazine*.

Entries for the November contest must be in the *Desert Magazine* office, Palm Desert, California, by November 20, and the winning prints will appear in the January issue. Pictures which arrive too late for one contest are held over for the next month. First prize is \$10; second prize \$5.00. For non-winning pictures accepted for publication \$3.00 each will be paid.

HERE ARE THE RULES

- 1—Prints for monthly contests must be black and white, 5x7 or larger, printed on glossy paper.
- 2—Each photograph submitted should be fully labeled as to subject, time and place. Also technical data: camera, shutter speed, hour of day, etc.
- 3—PRINTS WILL BE RETURNED WHEN RETURN POSTAGE IS ENCLOSED.
- 4—All entries must be in the *Desert Magazine* office by the 20th of the contest month.
- 5—Contests are open to both amateur and professional photographers. *Desert Magazine* requires first publication rights only of prize winning pictures.
- 6—Time and place of photograph are immaterial, except that it must be from the desert Southwest.
- 7—Judges will be selected from *Desert's* editorial staff, and awards will be made immediately after the close of the contest each month.

Address All Entries to Photo Editor

The Desert Magazine

PALM DESERT, CALIFORNIA



Maud, the burro, balked when the load was too heavy, so members of the party carried part of the camp outfit on their backs. Photo taken near Mountain Springs, on the grade below Jacumba.

Desert Trek in 1904 . . .

There are many old-timers in Southern California who have a vivid recollection of the Colorado desert in 1904, and of the rocky Devil's Canyon road by which Imperial Valley was reached from San Diego at that time. One of these desert veterans is E. A. Brininstool, who is now living in Los Angeles. Recently he gave the *Desert Magazine* permission to reprint the following narrative which he wrote for *Outdoor Life* magazine for one of its 1908 editions.

By E. A. BRINSTOOL

Map by Norton Allen

Photographs from C. C. Pierce collection

IT WAS November 30, 1904, that the writer, in company with Arthur J. Burdick, the well-known author; C. C. Pierce, an expert photographer, and two other companions, all of Los Angeles, made a ten days' tramp upon the Colorado desert, starting from Campo, 60 miles east of San Diego along the Mexican border (to which point we journeyed by stage) to Imperial, thence back to Los Angeles over the Southern Pacific railroad.

At San Diego we had been told some wonderful stories of a volcanic region in the desert where we could find some remarkable specimens. "A mountain of petrified oyster shells," one newspaper man told us, "and a place near it where you can pick up stone dumbbells and cannon-balls from the size of your fist to specimens as large as a water-bucket, all as round as a dollar." We were shown some specimens of the oyster shells. This

fired our ambition to seek for that particular spot in the desert where these wonderful stone formations abounded. Incidentally, we sought for and found it—but of that later.

Our stage ride from San Diego to Campo was full of interest. Day was just beginning to break when the four-horse stage-coach rattled up to the hotel and "All aboard!" from the driver brought us out with our packs, rifles, cameras and a big box of provisions. Stowing ourselves away, we were off on our all-day's ride up over the mountains.

Three changes of horses were made on the drive. The country is so mountainous and the roads so rough that an ordinary horse would go to pieces on the trip, but the sure-footed horses driven by our skillful ribbon-handler took us over the road at a lively clip, going down some of the grades on the other side of the numerous divides at

breakneck gallop, rounding sharp turns along the edge of dizzy precipices where the least misstep would have plunged the whole outfit hundreds of feet into the deep canyon below. Fortunately we met with no mishaps en route, and enjoyed the hair-raising experience, which, according to our driver, was "to his likin', as there wasn't any skeery wimmen along to screech an' raise thunder at his keardless drivin'!" We were continually flushing immense coveys of quail which would merely rise and fly a short distance, then settle to the ground and scuttle for the sagebrush within easy gunshot.

It was long after dark when Campo was reached. A store and an excellent hotel (for a mountain region) are about all there is to Campo proper.

We had expected to find pack burros at Campo, but there was not an animal in the whole settlement, and it looked as if we would have to play pack animal ourselves.

"Wait till morning," suggested the storekeeper. "They's a band of those Mission Indians camped up the road a piece. They've got some burros and you'll probably be able to make a dicker with them for one."

Around the big fireplace in Landlord Davis' living room, after a most



Campo store in December, 1904.

bountiful supper, we were regaled with stories of the early days in Campo when it was one of the wildest and wooliest settlements along the border. Within but a mile or so of the Mexican line, it was a rendezvous for desperate characters, white as well as Indian and Mexican. The old stone store shown in the illustration was the hanging-out place for all. Twenty years ago, when Old Man Gaskell was the proprietor, there was many a lively gun fight within its walls. Gaskell was a terror in a scrap, and behind his counters, in handy places, he kept a score or more revolvers, loaded and ready for any emergency. The walls of the building, four feet thick, made of the boulders which cover the mountain sides about Campo, were loop-holed so as to command views from all sides.

As our long ride had tired us, we soon sought the comfortable beds which Landlord Davis provided for his guests, and the last sounds we heard were the strains of music ground out by a sleepy-eyed Mexican in the dance hall over the store.

We were astir at daylight, the prime movement of the day being the solution of the burro problem. At the stone store we were introduced to one of the government Chinese inspectors or line riders, Agard by name. These riders patrol the border, watching for Chinese who attempt to enter the state illegally from Mexico. They ride fleet horses, go heavily armed and are alert, active, cool and courageous fellows. A few weeks previously Agard had arrested in the mountains two gangs of Chinese who were attempting to smuggle themselves across the line. There were eleven in one gang and fourteen in the other.

"Those Indians are still up the road," said Agard, "and if you fellows want a burro I'll go along up and help you make the dicker."

As none of us was conversant with Spanish we were glad of Agard's offer, and three of us went along, leaving the others to take photographs of Campo and its surroundings.

We were just in time. From a little bunch of live oaks a couple of bucks were leading two burros. One of the Indians was a weazen-faced, mummified-looking old chap whose feet were bare, and whose clothing consisted of a pair of tattered overalls and a dirty shirt open at the breast. Notwithstanding the fact that the weather was so cool that we shivered beneath our heavy clothing, the aged son of the desert appeared comfortable in his scant attire.

Agard picked out the likeliest-looking burro. He pointed toward it and asked "*Quanto?*"

We had expected to pay about \$5 for a burro and pack saddle, and were rather abashed when the Indian, after a moment of silence, replied, "*Ocho pesos*" (\$8).

Of course Agard expostulated with great vehemence at such fancy figures for a burro, whose commercial value on the Campo market is about one-fourth that figure, but expostulation was in vain. The Indian saw that we wanted a burro, and "tacked it on" accordingly. Agard offered \$5, \$6 and \$7 at brief intervals, in vain. It was *ocho pesos* or no burro, and finally in disgust Agard paid over the money, and the burro was our property.

It was after 11 o'clock when we shook hands with Agard and the storekeeper, both of whom had proved friends in a time of need.

"Let me give you one pointer," said Agard, as he said good-bye: "When you get to Jacumba, look out for Mrs. Foster. She'll be so glad to see you that she'll hold you all day while she talks."

Then turning our backs on the last signs of real civilization we started

eastward for the desert country nearly 25 miles beyond Campo. It was a beautiful day, cool and pleasant, the walking was excellent and we were all in high spirits. Noon found us three miles on our way, when, coming to an abandoned cabin near the trail, we stopped for our first meal over a campfire, which was made outside, using some flat stones for a fireplace. "Maud" (the name given to our burro by Burdick, although "she" was a gentleman burro) was turned loose to browse on the stubby sagebrush while we were eating.

As we were about to pack up and move on, we heard a hail from the roadside: "Guess you fellers left a couple o' canteens behind ye at Campo. Storekeeper said I'd prob'ly overtake ye!" The stranger grinned good-naturedly. He was tall, spare, a typical westerner, and had done us a good service. With two canteens short we should have indeed been in trouble when we entered the desert region. The stranger informed us that his name was Johnson—"Nephy of ol' President Andy Johnson"—and that he was en route from Otay to Imperial.

Mr. Johnson hinted that he would like to camp with us along the route. He had but a single horse with a heavy load and could travel no faster than we were going. We informed Mr. Johnson that his company would be most agreeable, and the old fellow never lost sight of us until we bade him good-bye on the banks of New River near Silsbee several days later.

But about 5 o'clock in the morning a heavy fog enveloped us and began to drizzle down. Daylight found things in no better condition, and our blankets were soaked completely through by the heavy mist. Wet and shivering, we cowered under the rocks and ate breakfast off Burdick's waterproof canvas blanket-covering, in which little pools of water would gather and trickle over bread, butter and all other eatables. The fog grew more dense and was soon so thick that objects a hundred yards away could not be distinguished, and we could only guess at the number of miles away that our burro might be. There was only one thing to do and that was for all hands to turn out and scour the country for the animal, which might be within a stone's throw of the camp or hitting the trail back toward Campo. We scattered through the sagebrush, heavy with the light rain, and soon were wet to the skin. Up and down we tramped, and at last, after an hour's search, Burdick found the little beast, half a mile up the trail, comfortably ensconced beneath a big oak tree, hobnobbing with several head of cattle which had sought shelter under the same friendly branches.



Members of the party gathered these sandstone concretions in the Yuha basin during the hour they stopped there for lunch.

It was long past the noon hour when we came in sight of Jacumba and Foster's ranch. The house itself is a low stone structure with a straw-thatched roof and an arrow-weed ramada extending across the front.

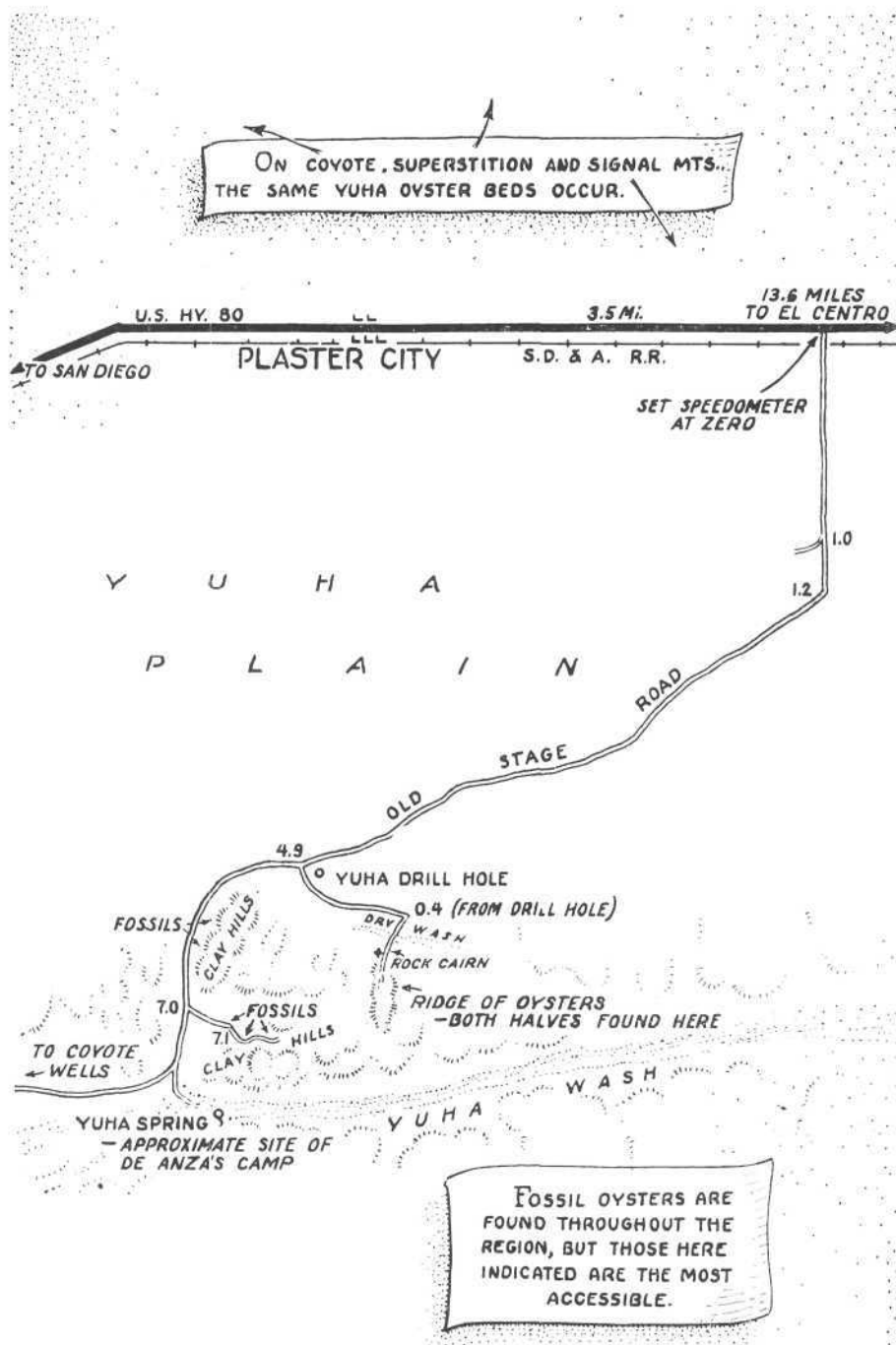
Standing in the ranch house door we discerned a woman of portly appearance who, upon catching sight of us, hastened out to meet us, with "How are you, gentlemen? Where you from? Where you going? I've got some nice,

fresh, hot bread to sell, only 10 cents a loaf. Come in! Come in!" She rattled off the words like a lawn-mower cutting grass.

There was no need to ask if this was Mrs. Foster. She answered Ag-

Oyster shells in Yuha basin. Desert Magazine issue of May, 1940, carried more complete story about the Yuha fossil beds.





The Yuha plain is below sea level in Imperial Valley. Juan Bautista de Anza and his expedition camped at Yuha spring in the winter of 1775.

ard's description perfectly, and while we rested under the ramada, waiting for the others of the party to appear, she bustled about asking more questions and bringing out hot bread and syrup.

Foster's ranch is within a quarter of a mile of the Mexican line. One section of barbed wire fence runs within forty feet of Mexico, and Mrs. Foster took pains to inform us that when we came to that particular piece of fence to walk "out around it so's to say you've been in Mexico."

It was 3 o'clock when Maud and our companions appeared. The burro had stubbornly refused to carry the

load and had lain down in the trail repeatedly, necessitating several halts for breathing spells. Old Man Johnson had long since arrived, eaten his lunch and was waiting to see what we intended to do about camping for the night. It was a cheerless outlook. The heavy mist had now turned into a drizzling rain and steadily increased in volume, while the wind was blowing a small-sized gale, and it looked as if we were doomed to spend a most uncomfortable night.

Finally Mrs. Foster remarked: "There's a couple of old abandoned shacks down the trail about four miles. You'd better hike for one of them and

get in out of the rain for the night."

We had barely time to reach the old shack which Burdick had chosen before the rain was coming down in a fairly respectable shower (for a desert country). The shanty Burdick had selected had no fireplace, but our friend Johnson had a portable campstove in his wagon, which was carried inside, and we felt that we were ready to bid defiance to even a Kansas blizzard. But the crazy old shanty had not been battened, and there were great cracks in the floor and sides through which the keen wind whistled in a most uncomfortable manner. The only wood available was the green sagebrush, with a few pieces of pine which we found inside the shanty, and it was no small trick to keep the fire going with the wet sagebrush. However, we managed to get supper and tried to dry our blankets a little, but with poor success, and we finally gave it up and spread them out on the floor, to snatch what rest we could. I was appointed fireman for the night, and although I slept wrapped in a heavy ulster and two blankets, with my back fairly against the stove door, and kept the little sheet-iron affair crammed with wood, I shivered all night long. It was about the most uncomfortable night I passed on the whole trip. The rain ceased before morning, and at daylight the sun shed its genial warmth over the earth and we traveled that day in comfort.

We were now on the last stretch of mountain travel before crossing the divide and descending into the desert. Mountain Springs, the next watering place beyond Foster's ranch, was purported to be nine miles from the cabin in which we had passed the night, and the trail from the cabin was a gradual rise. Up, up, we clambered, through a wilderness of rocks and giant boulders, cacti and sagebrush, and about 10 o'clock the divide was reached—and the broad expanse of the great Colorado desert lay spread before us, a boundless, seemingly endless stretch of barren desolation, upon which for 150 miles to the right and left we could gaze without discerning a single sign of civilization, although we knew that Imperial, Brawley, Silsbee and other recently-started desert towns were within its borders but too far away to be seen with the naked eye. The Superstition Mountains, one of our objective points, we easily picked out, from the descriptions furnished us, by their long, low appearance and the sand dunes surrounding them.

Mountain Springs was reached shortly after 11 o'clock and a rest of an hour and a half taken to prepare us for the tedious pull down through Devil's Canyon and its twelve miles of



Maud and the author. Superstition Mountains of California in the background.

sand. "You'll get all you want, going through Devil's Canyon!" we had been told.

Travel was slow through the canyon, as it was a hard pull for both man and beast, and darkness found us several miles from Coyote Wells. A hasty lunch was swallowed, the packs were loosened and a liberal allowance of grain given the burro, after which the march was resumed.

Coyote Wells is well named. Hardly had we unpacked before the coyotes began to serenade us from the surrounding sand dunes. Their screechy, melancholy wail resounded until it seemed as if all the clans of the desert had assembled to give us an evening concert.

The sagebrush had been grubbed off by former travelers for a radius of 500 yards, and the only wood obtainable was found by digging in the sand dunes for the roots of dead mesquite. It was only after the most laborious work that we obtained enough of the roots to boil our coffee. A hard bed on the sand came next, and we were lulled to sleep by the wailing notes of the coyotes.

The much-talked-of Oyster Shell Mountain was the next important point of interest we intended searching for. The only directions we had to go by were that the phenomenon was situated between Coyote Wells and New River, about a mile and a half off the main road near the Yuha oil well.

Two hours' travel brought us to a trail leading off the main one, and which, we discovered by consulting our road map, was the trail to the Yuha oil well. Accordingly we struck off in this direction, and soon were entering a region which was clearly volcanic. Not a shrub or bush of any kind was growing in this section, and the nature of the ground showed that centuries before the spouting of some great volcano had thrown about the place the lava and stones which were strewn there. The ground was covered with vari-colored stones, most of them smaller than one's fist and in this vol-

canic neighborhood one of the party picked up a small stone nearly as clear as glass. A lapidary at Los Angeles who later examined it pronounced it a white topaz, worth when polished not less than \$60. There are doubtless gems of considerable value to be found here by a careful and systematic search.

A mile's travel over the trail brought us in sight of the oil well. Work had been suspended in drilling, but an old grizzled chap who solemnly informed us that his name was Billy, kept guard, with two fierce dogs, over the property.

When asked regarding the oyster shell mountain the old man shook his head. He had never heard of any such spot; but as the country was full of interesting geological formations an oyster shell mountain was not improbable. We ate a hasty dinner and then while one drove the burro along the trail the others scattered out to search for the oyster shell mountain. The country here took on a different aspect from that a mile or two back. The work of erosion was here displayed on every hand; the action of wind and sand forming some of the oddest and most fantastic shapes of the rocks that can be conceived. Indeed one cannot by words picture the scene. Stone dumb-bells, perfect in shape; stone cannon-balls of all sizes; rocks as round as a dollar, where with a hatchet one can chip off regular dinner plates a quarter of an inch thick and fifteen inches in diameter; rocks which at a distance resemble a cabbage patch; others the shape of deer's horns and branches of coral; queer cup-shaped and bowl-shaped formations; others like fantastic hanging baskets; formations so grotesque and unique as to defy description. One could tarry a week in this fascinating spot and pick up enough curios to stock a house from cellar to garret.

Presently a shout from two of the party attracted the attention of the others. "Here's your oyster shell mountain!" they fairly shrieked. We

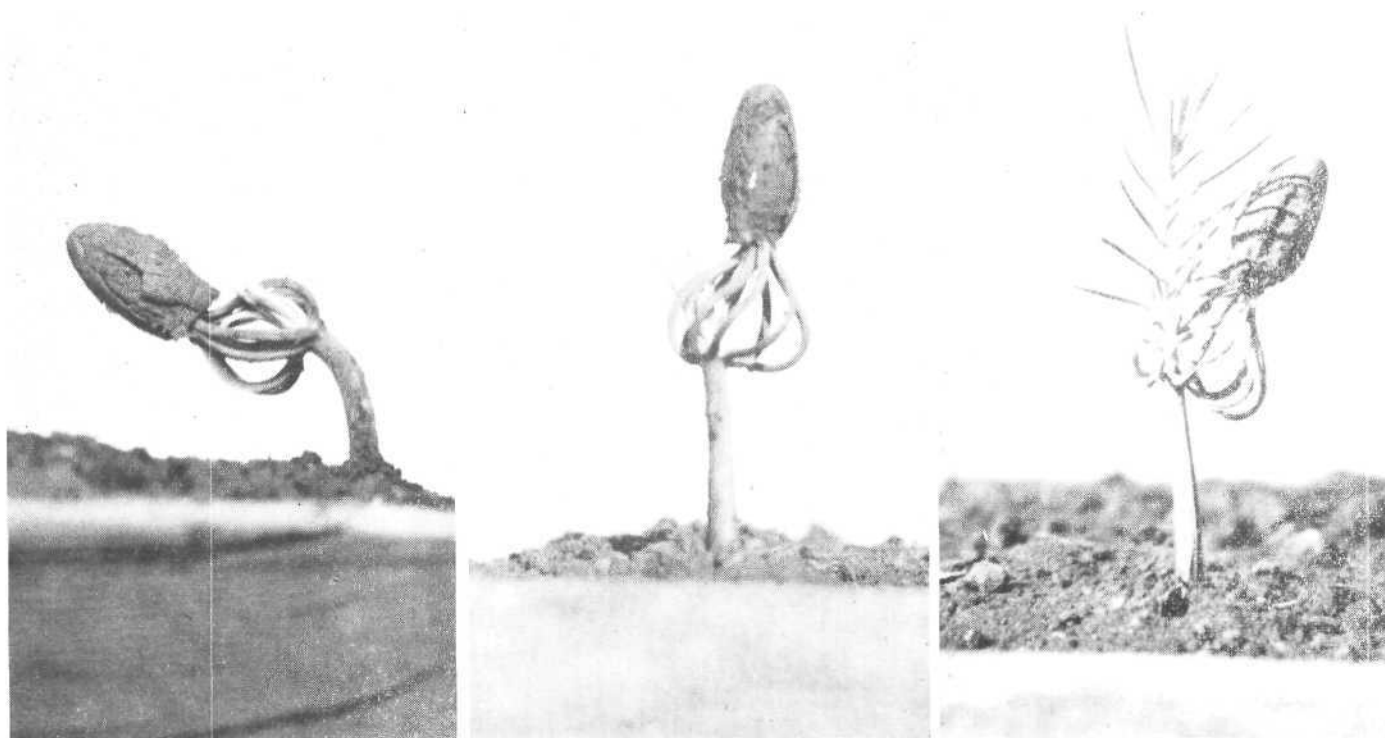
raced to the spot and stood with mouths agape at the sight. There were the oyster shells, plainly enough, a large mound of them. The hill, which was strewn with nothing else, was perhaps 20 feet in height and 50 in circumference, and shells from the size of a dollar to those the size of a man's two hands covered the mound. All were petrified, and, of course, deposited there centuries before when the waters of the ocean covered the desert. There were undoubtedly other mounds of them, but we did not discover the particular mountain of which we had heard at San Diego, purported to be 300 feet high, although the existence of this smaller mound proves that the story is not without foundation.

We were loath to leave the section, as strange sights were visible everywhere, but we were limited in time and reluctantly turned our faces toward New River. The volcanic region was soon left behind, and we were once again traveling through sagebrush and sand. About 4 o'clock we could observe a long row of mesquites in the distance, indicating that New River was close at hand, and the cheery light of the campfire in a grove of mesquites on the river bank was a welcome sight an hour later.

New River* is merely the overflow of the great Colorado and was the source from which Imperial Valley settlers got most of their water before their canal to the river was completed. The stream is muddy, yet the water is not bad for cooking and drinking if allowed to settle before using.

Imperial Valley was our destination, and after a brief excursion to the Superstition Mountains on the west, we gave our faithful Maud to a rancher in payment for a buggy ride to the town of Imperial where we caught the Southern Pacific train for Los Angeles.

*A year after this was written the Colorado River broke through and for nearly three years the entire stream followed the New River and Alamo channels to form Salton Sea.



As the embryo sends out its first green shoot and the seed leaves appear they lift with them the shell in which they nestled. Several weeks later, after the foliage leaves begin to appear the shell is dropped.

A Pinyon is Born

By RUTH COOLEY CATER

7HOSE PINYON trees which add so much beauty to the arid hills of the Southwest, have you ever wondered how they were born?

The best way to observe the birth of a tree is to plant seeds where you can keep close watch on them—and Pinyon lends itself especially well to an observation project of this kind. The size of the embryo makes it possible to see without a magnifying glass what a Pinyon tree looks like before it is born.

To see the tiny germ of life as Nature created it, remove the seed's shell and then carefully cut lengthwise into the fleshy tissue until you can break it open and lift out the embryo. At the upper end of this tiny rudimentary plant are the seed leaves, which may be counted. The large part below the seed leaves is the hypocotyl. At its tip, surrounded by the bases of the seed leaves, is the bud or growing point from which the first foliage comes.

The difficulties confronting the embryo plant in emerging from the shell often make the birth process very hard. One of my Single-leaf Pinyon seeds was planted August 17 in a box which I kept in the house, but it was not until the 19th of September that I saw a speck of green above the earth. The next day a small arch, formed by the elongating of the embryo's hypocotyl, appeared. Two days later this arch was a little larger and the bases of the seed leaves could be seen.

During the next five days the arch continued to grow higher and I watched eagerly to see whether the shell would be lifted up with the seed leaves. In five more days the arch had become a partly-straightened grayish-green

stem about one inch long and one-eighth inch thick. There were eight seed leaves, their tips imprisoned within the uplifted shell.

It took two more days for the stem, struggling under its burden of seed leaves and nearly empty shell, to stand about vertical. Then a new stem with foliage leaves pushed up from between two of the seed leaves.

The new stem, bluegreen like the foliage, grew to a height of one inch, and more leaves came out. The stem below the seed leaves turned brown; the seed leaves dried up. The rudimentary plant which had begun its life within the seed had passed through various stages of birth and was now a baby tree nearly three inches tall. It was many weeks before the shell dropped off.

And here is one of the intriguing things about the Pinyons. Each of the four species bears its own typical number of leaves in a bundle: the Single-leaf Pinyon, *Pinus monophylla*, one in a "bundle"; the Rocky Mountain Pinyon, *Pinus edulis*, two in a bundle; the Mexican Pinyon, *Pinus cembroides*, three in a bundle; the Parry Pinyon, *Pinus parryana*, four in a bundle. However, this rule of "One, two, three, four" is not rigidly kept, so look for some variation.

Just as interesting, though not so easily observed, are tree births in the forest, so go out among the Pinyons in the spring when trees are being born and note some of the difficulties they have to overcome in their natural habitat. Then visit the baby trees from time to time. Better yet, keep track of them from year to year, for the Pinyon tree is a fascinating study through all the years of its life.

LIFE ON THE DESERT

By RUFUS D. JOHNSON

WHEN I was a youngster in the early '90s I would climb to the top of Sugar Loaf Mountain overlooking St. George and the Virgin River of Utah, and gaze wonderingly across the vast distances that extended southward to the Colorado River.

To me it was a land of mystery, tinged with a suggestion of the sinister. For it was from out in that region — known today as the Arizona "strip" — that raiding Indians had on more than one occasion threatened the security of our southern Utah communities. Indeed, I could look down and see the black volcanic ridge where a posse from St. George had intercepted a raiding party after a foray on Pine Valley settlement to the north and had killed 11 of the redskins and recovered the cattle which the Indians were endeavoring to drive across the Colorado River.

At another time the warring tribesmen had killed Dr. Whitmore and Brother McIntyre at Pipe Springs. Also, that hazy distant region was the home of old Toab (Toe-ab) the Shivwits Indian whose periodic appearances in the streets of St. George would cause us children to scamper back to the safety of our own back yards. It was said that Toab had been the leader of the band which killed three members of Major Powell's Colorado River expedition after they had climbed out of the gorge at the place known later as Separation Rapids.

I longed for the time when I would grow up, and could join the cowboys who were constantly riding in from the "strip," and become better acquainted with the region which was their home—a region with such alluring place names as Trumbull, Parashaunt, Wolfhole, Canaan and Toro-weap.

Later, circumstances took me away from Southern Utah and it was not until June, 1927, that I had a chance to realize my boyhood dreams. My brother, the late Judge Ben Johnson of Salt Lake City, whose hobby was botany, wished to make a trip into my land of mystery to look over the plant life there. When he received an invitation from John Stutznegger of St. George to visit him at the Mokiak Ranch near the base of Mt. Dellenbaugh on the Shivwits Plateau he accepted it at once. I offered the use of my Model T and accompanied him with my 16-year-old son Ellis.

Mokiak Ranch lies 80 miles south

of St. George and the road at that time was a thing to try a man's soul. On one stretch Ellis noted that we crossed one deep wash 31 times and the going was slow all the way. The flora of the region proved disappointing. The plant cover was profuse in general but there were too many of the same things, not the variety we had anticipated. As we climbed onto the plateau from the valley of the Virgin, a species of *Escholtzia* was observed, the first time I had ever seen the California poppy growing wild. In that dry country the plants were only a few inches high, but the corollas, though small, were perfect. Patches of verbenas brightened the gray landscape and a gay little *Gaillardia* that I had never seen before, flourished. On Poverty Mountain we found penstemons of the fir-leaf type, probably *P. coloradoensis*.

The only human habitation we met in all that vast expanse was a single house at Wolfhole, tenanted by a lone woman who had the most frightened eyes I have ever looked into. Her husband was out on the range. Here the road divides, one branch heading eastward to the Trumbull country, the other southward toward Grand Wash. We turned left from the latter road to reach Mokiak Ranch which we found nestling in an arroyo on the fringe of the ponderosa pine belt and surrounded by an incredible number of junipers. These are known locally as "cedars." (*J. utahensis*) We pitched our tent under a tall ponderosa and we elders had a good rest while Ellis enjoyed himself riding a cowpony which one of the hands had provided.

Early next morning Ben and I set out on a botanical ramble, taking along a few sandwiches in a soda cracker box. Since we intended to return by mid-afternoon we carried but a single quart canteen of water.

Mt. Dellenbaugh is not high from the plateau side and we decided to go to the summit. As we progressed toward the base we found the brush and juniper covered terrain a continuous succession of arroyos like a gigantic washboard. All up and down, in and out, over and across were cattle trails, some faint, others quite prominent until they slowly petered out among the rocks. When we were on the ridges we could look around the country to far distances, then as we went down the view would be blotted out until we topped the next divide. Unutterable sameness, all very confusing.

Even the old-timers sometimes get lost on the desert—and here is the experience of two who were rescued just when they had given up hope. This was one of the winning stories in Desert Magazine's Life-on-the-Desert contest.

We finally reached the shoulder of Mt. Dellenbaugh, then climbed the steep slope to the top. The distance was not great but it seemed to be quite a chore in the intense heat. Ben was bothered by a heart condition and I had recently been in a hospital with an ulcer so both of us were in poor shape for strenuous exercise.

We rested at the summit on what was undoubtedly a man-made fortification of some sort, rocks set into wall-like positions that seemed to indicate purposes of defense. Interesting plants were few but the view out across the Grand Canyon area was magnificent. Although we were but a few miles from Mokiak there was no sign of the ranch house as we looked back in the direction whence we had come, over the corrugated terrain verdant with the fresh green of countless junipers.

As it was close to midday we ate our sandwiches and had a drink from our meagre water supply which we had refrained from using until we were ready to return to camp. About four ounces remained of the quart and this by the law of share alike was mine. Also I retained the cracker box with its bright red cover, for possible use in holding any plants I might wish to dig. Descending to the shoulder we plunged into the bush again, heading in the direction we supposed the ranch to be. After a couple of hours trudging up and down the ridges in the afternoon heat we became painfully aware that we had missed our bearings. The scant landmarks we thought we had noted utterly failed us. Nothing looked the same. Endless miles of arroyo and ridge, pines, cedars and brush. We were so deeply embowered that we could rarely see the horizon. By now we realized that we were lost. All afternoon we tramped, hoping each rise would show us the welcome signs of camp. Now we were extremely thirsty and infinitely tired. At one point I climbed high up in a dead Ponderosa from whence I could see the mountain and far to what I took to be north I could see the gleam of one of those muddy dammed up stock watering holes. That was a bit cheering, but there was no sign of the ranch.

We had followed many cattle trails during the day, but each would invariably fade out into many faint trails leading nowhere. Late in the afternoon we struck one that was much

larger than any we had seen and Ben said he was sure that was the one we had come out on. "Now you can finish up that water," he said, "we'll soon be in camp." I tried to get him to take part of it but he refused, so I dribbled it into my tight throat.

His prediction did not work out. After much plodding, we built a fire and sent up a smoke signal, using green juniper branches to produce the murk. We hoped it might suggest to anyone who saw it that we were in trouble. In case riders might come to the spot I left a note on the back of some of the red cracker box label stating that we had gone back toward the shoulder of Mt. Dellenbaugh.

When we finally dragged ourselves up on the rocks about dusk we were utterly exhausted. I seemed to have no throat and my lips felt like a pair of inflated inner tubes. We lay down on the ground until we could summon energy enough to begin to gather dry wood. Selecting a couple of tall cedars that stood apart from the brush, we piled the wood in between the branches until each was a mass of fuel. As darkness fell we touched off the first one. It made a thrilling beacon, the flames shooting high into the starry night. After it died down we laid down again and waited. No answering fire appeared. About midnight we ignited the second tree, again settling down to wait as the flames died low.

We didn't talk much. Speech was rather difficult. A small eternity passed by during which I mentally composed a letter for Ellis to be written on the white side of the remaining cracker box label. I felt that unless someone picked us up we were finished.

Suddenly Ben raised up saying, "I heard a whistle."

"It's only one of those birds we have been hearing all day" I said. "You know we commented on how like a human whistle their note sounded."

"Birds don't whistle at night," he insisted.

We strained our ears for a repetition. None came. We settled back and waited. Again he sat up quickly.

"There it is again. That was no bird!" My interest now aroused, I stood up and moved over to where I could look down the slope. There, way out on a distant ridge was the most beautiful light I had ever seen—the tiny gleam of a bobbing flashlight! Soon we could hear the scrunch of hoofs in contact with rocks and then the blessed silhouettes of men and horses. Quickly we were hoisted into saddles and were being led by cowboys who miraculously could pick their way in the darkness straight over the arroyos and ridges to the spot we had slogged so painfully to find. The ranch

cook had a big pot of hot tea ready, and before dawn we were in our beds dead to the world in sleep.

We learned later that we were less than four miles from the ranch and had probably wandered in the proverbial circle. At the house as night approached Ellis had suggested to the boss that someone be sent to look for us, but John scouted the idea that Ben

could be lost. Around midnight Ellis, restless and worried, had climbed up on the ridge above the camp and was able to see our flaming juniper pyre.

Later Ben told me that he had cherished the same intentions I had with regard to the remaining cracker box label. He said he had watched all along that I did not throw the box away.

Desert Quiz

Maybe you won't answer them all correctly—but they can't send you to jail for that, so get your pencil and let's find out how much you really know about this desert country. It will be good brain exercise, and you will gain some new information about the most fascinating region in the United States—the Great American Desert. Twelve to 14 is a fair score; 15 to 17 is good, 18 or over is super. Take your time and study each question carefully. The answers are on page 28.

- 1—One of the following ranges of mountains is not on the California desert—Panamint Mountains . Wasatch Mountains . Chuckawalla Mountains . Sangre de Cristo .
- 2—San Geronio Pass is located in — California . Nevada . Arizona . New Mexico .
- 3—The species of fish for which an island in Salton Sea was named is—Shad . Mullet . Catfish . Bass .
- 4—Principal industry at McNary, Arizona, is — Lumbering . Mining . Sheep raising . Weaving .
- 5—Stopping at Peach Springs, Arizona, the Indians you would see loitering around the vicinity most likely would be—Papagos . Hopis . Hualpais . Zunis .
- 6—The old territorial prison at Yuma, Arizona, now used as a museum, is built of—Stone . Logs . Adobe . Cement blocks .
- 7—Azurite most often is found in formation with — Garnets . Opal . Zinc . Malachite .
- 8—Fairy duster is the common name for a desert — Lizard . Bird . Flower . Mineral .
- 9—Jacob Hamblin was a—Mormon pioneer . Scout for Kearny's army . Boatman for Major John Wesley Powell . Butterfield stage driver .
- 10—Callville was once—An outpost on the Colorado River . Place where Geronimo surrendered . Scene of a famous Indian battle . Stage station on the Butterfield overland route .
- 11—The poem "Mornin' on the Desert" was written by — Marshal South . George Wharton James . Sharlot Hall . Author unknown .
- 12—Salt Cedar is most likely found growing on—Sand dunes . Rocky mesas . Desert seeps and water courses . Dry lake beds .
- 13—Iceberg Canyon is most easily reached by — Motorboat on Lake Mead . Pack trip from Bluff, Utah . Following the trail to Telescope Peak in Death Valley Monument . Taking the boat trip from Mexican Hat to Lee's Ferry .
- 14—The most direct paved route from Los Angeles to Phoenix crosses the Colorado River at—Yuma . Needles . Ehrenberg . Parker .
- 15—The cactus preferred by certain species of woodpecker for drilling their holes is — Cholla . Beavertail . Prickly pear . Saguaro .
- 16—If you wanted to visit Harry Goulding's trading post you would go to—Canyon de Chelly . Tuba City . Monument Valley . San Carlos Indian reservation .
- 17—Most conspicuous mountains to be seen from Flagstaff, Arizona, are — Superstition Mountains of Arizona . San Francisco Peaks . Catalina Mountains . Henry Mountains .
- 18—The ghost mining camp of Calico is located in—Nevada . California . New Mexico . Arizona .
- 19—Before the white men brought soap to their country, the Indians of the Southwest washed their hair with suds made from—Mesquite twigs . Yucca roots . Purple sage leaves . Milkweed .
- 20—Chalcedony roses are a form of—Calcite . Quartz . Hematite . Scheelite .

Letters

Mud-Pack Serenade . . .

Los Angeles, California

Desert:

Driving across country from Louisiana to California, my two traveling companions — both women — and I shared a strange experience on the fringe of desert land.

It was June, and already the heat of summer was upon us. We planned our schedule accordingly — traveling from late afternoon to early morning and resting by day in the comfort of air-conditioned motor courts. The full responsibility of driving fell upon the owner of the car, as I had not driven for years and had no license. The other member of our party was quite elderly.

While on a desolate stretch in Arizona, our driver reached a state of night fatigue and drowsiness, a dangerous condition requiring immediate rest. I consulted our road-map. We could not reach the next town for some time, so my friend pulled eight or 10 feet off the highway for a brief nap. I was to remain "on guard" and awaken her in 20 minutes. Soon she was lost in slumber, and I was alone with the desert. It was 2:15 a.m.

We had been there no longer than 10 minutes when upon the still night air, from behind a huge boulder, came a most unusual sound, low and guttural, of animal-like quality. This first call apparently was a signal, followed by three or four successive ones. Then an answering incantation—voiced by not one but seemingly hundreds of fellow creatures—joined in, with perfect timing, in a higher key. The leader maintained the same deep call, the others canting their response in sharp staccato-like notes. The combined utterances had the ludicrous sound of the words "Mud-Pack — Mud-Pack — Mud-Pack — Mud-Pack — Mud-Pack —"

Never was a choir more perfect in its timing, swelling to heights of great crescendo. Then, at a given signal by the leader, all stopped precisely at the very same time. Not a single erring or over-zealous member in this unseen choir—not one "Mud-Pack" over. I was both charmed and amazed by the strange collaboration.

After a few seconds' silence, they began all over again. First the prologue, then all together in one great swelling volume, "Mud-Pack — Mud-Pack — Mud-Pack —," faster and faster. Each rendition was cut sharply

by the leader, to be resumed at his command.

While pondering this strange performance, the lights of an approaching vehicle shone upon the highway. A large truck came into view and passed. The chanting ceased abruptly, and the choir was no more. The explanation was sealed within the mystery of the desert.

In seeking to learn the origin of the sounds, I have spoken with many people who have traveled that section. Some have wondered if they might have emanated from giant-type desert lizards. In great numbers they thought these might have achieved the effect which I heard.

ELBA ST. CLAIRE

What Reader St. Claire heard was one of the very rare coyote serenades. Twice in my 40 years on the desert I have listened to one of these eerie concerts. Once was while I was working on the U. S. Land Office Survey on the Colorado River Indian reservation at Parker, Arizona. Lying in my sleeping bag among the mesquite trees, I was able to get a fairly close idea as to how many coyotes took part in the midnight serenade. I don't believe there were more than half a dozen, although it sounded like hundreds. Archer B. Gilfillan, reporting in J. Frank Dobie's book, "Voice of the Coyote," offers an explanation of this illusion of numbers a few coyotes can create. According to Gilfillan, "when two coyotes are singing a duet, they do not bark haphazardly or in unison, but they catch each other up with lightning-like quickness, so that two coyotes will produce such a torrent of barks that the uninitiated would swear there was a large pack of them." Dobie's book also includes other descriptions of the coyote's weird song.—R. H.

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First at Lake Mohave . . .

Carson City, Nevada

Desert:

I take exception to the statement prefacing A. La Vielle Lawbaugh's article, "When Ancients Dwelt on the Shores of Old Lake Mohave," in *Desert Magazine* for September 1952, wherein the Lawbaughs are credited with having conducted the most exhaustive study in the region to date.

Ancient Lake Mohave was discovered by William H. Campbell, Elizabeth W. Crozer Campbell and Charles A. Amsden in the fall of 1934. For years joint studies were conducted about its shores by Southwest Museum and California Institute of Technology prior to the report being published in Numbers 9 and 11 of the Southwest Museum Papers: "The Archeology of

Pleistocene Lake Mohave," and "The Pinto Basin Site."

A topographical map more than a hundred miles in extent was made under skilled workers from California Institute of Technology. Their scientists conducted studies of minerals, fossil bones, geology, etc., both on the shores of ancient Lake Mohave and at the Pinto Basin site. One expedition after another was led by William H. Campbell to both places, while thousands of artifacts were gathered and described in the published reports from both stations. Dr. Ernst Antevs carried on studies of past geology and climatology in connection with the old lake, and many conferences were held among top ranking scientists in an effort to solve the problems presented by both regions.

For 20 years my husband and I led expeditions into the deserts of Southern California and elsewhere, and a field laboratory of the Southwest Museum was maintained at Twentynine Palms for the study of the archeology of the area. Thousands of sites in the Mohave and Colorado deserts, as well as along the entire Mohave River drainage, were found, plotted and studied and often described in scientific publications. A detailed study was made of nearly 90 dry lakes and playas of the region, and extinct streams in the California deserts and elsewhere were plotted.

We trust the Lawbaughs and all other amateur archeologists obtain Federal Permits from the Department Archeologist and the Secretary of the Interior at Washington, D. C., before they remove archeological material from the public domain. Failure to do so is punishable by fine or imprisonment under the Antiquity Act.

ELIZABETH W. C. CAMPBELL

• • •

By the Wheelbarrow-load . . .

Arroyo Grande, California

Desert:

I wish the beer industry could be urged to present their product to the public in containers requiring a deposit upon purchase, to be refunded with the empty's return. I have to take a wheelbarrow to clean up the debris which accumulates along our frontage on Highway 1, and your estimate that three-fourths of the offensive litter originates in the breweries is low — practically all of my weekly pickup is comprised of beer cans.

I should think the breweries would be willing to help cope with this problem. It would provide good publicity for them and certainly would do a public service. With a little good leadership, we might be able to coax them into the anti-beercan-litter campaign.

RUTH M. LANE

Clean Up Kleenex, Too . . .

Lomita, California

Desert:

That is a good suggestion—to charge the breweries for clearing the litter, largely beer cans, from along our highways. If the breweries couldn't be taxed for the mess their product creates, they might at least print a notice on their cans, asking beer drinkers to refrain from tossing their empties just anywhere and to throw them instead into garbage cans and boxes provided for such trash.

While we're at it, we might suggest that Kleenex and other tissue manufacturers design a disposal unit for each pack of their product, so that our landscapes wouldn't be cluttered up with unsightly Kleenex roses.

HAROLD L. MONROE

Desert Peaks Fans . . .

Salem, Oregon

Desert:

We enjoy those mountain climbing articles by Louise Werner. Hope in future issues of *Desert* to see more stories on this exhilarating desert recreation.

CARROLL AND
RANDALL HAMLIN

Desert soon will carry a story on backpacking in which Weldon Heald tells how to plan overnight hikes in desert ranges, giving equipment suggestions, hiking tips and food pack ideas. It will introduce many more desert lovers to the exciting outdoor sport already discovered by Readers Hamlin.—R. H.

Bring 'em to the Desert . . .

Twentynine Palms, California

Desert:

Recently I have completed a tour of many of the art galleries along the coast, and I cannot refrain from commenting on some of the water colors I have seen.

Modernistic art is bad enough when done in oils—but when the artists turn to water colors in an effort to secure their bizarre effects, the results often are completely beyond the realm of comprehension.

I was interested in the reaction of visitors when they were confronted with the works of the modernists. The reactions ranged from shock and self-doubt in those who claim no knowledge of art, to plain nausea in the more sensitive students of true art.

The tragedy of all this is that people qualified to wield an effective influence too often are afraid to make any protest for fear of being called "old fogies."

I would like to see *Desert Magazine* do some crusading against the distortions of form and color which the so-

called modernists are permitting to creep into the art galleries under the name of art. What these modernists need is to get out on the desert where they are confronted with the clean harsh beauty and truth of the good earth as God made it.

If some person with plenty of money would like to do something worth while I would suggest that he set up a foundation to employ competent psychiatrists to visit the art galleries and list the names of artists whose work indicates mental illness—and then provide for these people to come to a quiet place on the desert where, in contact with the realities of life, they can regain their sense of values.

JOHN HILTON

Shalako Too Early . . .

Albuquerque, New Mexico

Desert:

I was pleased to note in *Desert* that the Hopi Indians issued a public request asking white Americans who attend their ceremonial dances "please to dress decently and bring no liquor." I hope the request was honored, for reasons pointed out in September's "Just Between You and Me."

But the August ceremony to which *Desert* referred could not have been the Shalako. The Shalako is not a Hopi dance, but one peculiar to the Zuni. It always is held the last of November or first of December, the exact date being announced a week or so before the dance.

The Hopis have their Snake dances, Antelope dances and the Flute Ceremony in August.

MRS. W. W. TURNER

Mrs. Turner is right. Desert was thinking of another Hopi dance given in August at Shungopovi on the Second Mesa in Northern Arizona, and got its terms mixed. But the editors hope tourist visitors will dress and conduct themselves properly at all Indian religious rites.—R. H.

Quizzes Desert Quizzer . . .

Los Angeles, California

Desert:

In Question No. 7 of the September *Desert Quiz*, you ask the location of "Jacob's" Lake. Shouldn't that be Jacob Lake—without the possessive?

CARL ROMIG

Yes. Although early geographers often disagreed (The University of Arizona's "Arizona Place Names," 1935, spelled it "Jacobs Lake"; other maps and gazetteers used "Jacob's Lake"), cartographers now agree almost unanimously with reader Romig—and call the body of water on Northern Arizona's Kaibab Plateau "Jacob Lake." Whipple, during the expedition of 1854, referred to it as "Jacob's Well."—R. H.

From an Old-Timer . . .

Ontario, California

Desert:

I found your May "In Memory" feature very interesting—particularly because I am one of the old-timers myself. I first came to Nevada in 1904, at the age of 17, and in my day I prospected, mined, skinned mules, punched cattle and drove freight teams over a lot of desert from Goldfield to Tucson.

There are two graves not pictured in your May layout which may interest your readers. One is between Cave Spring and Garlic Spring on one of the old immigrant trails from Las Vegas via Goodsprings, Horse Thief Spring, China Ranch, Cave and Garlic Springs and Coyote Well to Barstow. Today the road is sandy, rough and washed out in several places, but it still can be traveled with four-wheel drive. I drove a herd of horses through that country in 1908, enroute to San Bernardino, and I don't think the trail has been used much since.

The other grave lies in a group of greasewood bushes at the foot of a small hill northwest of Coyote Well. It was marked with a board on which was written: "Pardner respect this Grave." There was no name or date.

I was told in Barstow that this was the grave of a bandit who held up the stage which ran from Daggett to the mines at Calico. He escaped with some silver bars, taking out across the desert. A posse overtook him at Coyote Well, shot him and buried him at the foot of the small hill.

T. W. MESCHER

Invitation for Rockhounds . . .

Fresno, California

Desert:

I was very interested in "Amateur Gem Cutter" in the August issue of *Desert Magazine*, in which Leland Quick suggests rockhounds and lapidaries learn more about the "lost art" of stone masonry.

I am in the general contracting business in Fresno, and we recently opened a slate quarry near Mariposa, at Mt. Boullion, under the name of Yosemite Flagstone Quarry. The site produces a highly colored slate which we ship throughout California for use as decorative and structural stone.

Please extend to Mr. Quick and to all members of lapidary and gem and mineral clubs a cordial invitation to visit our quarry at any time. I am sure they will find it interesting, and the area is rich in other minerals and stones as well. They might even pan a little gold.

The quarry is seven miles off Yosemite Highway 140 and very easy to reach.

GORDON FLEISHER



Pictures of The Month

Dune Patterns . . .

Shadows cast by a late afternoon sun create dramatic black-and-white designs on sand dunes in Death Valley, California. Arthur W. Allsop of La Crescenta, California, was awarded first prize in Desert Magazine's September photo contest for this study, taken with a 4x5 Speed Graphic camera, Super Panchromatic Press film, K2 filter, 1/100 second at f18.

Desert Lily . . .

The desert lily's pale complexion so nearly matches the coloring of its sandy surroundings that it is difficult to capture its beauty on film. Norman A. Moore of Inglewood, California, succeeded with this picture of lilies in the Borrego Badlands near California's Salton Sea, awarded second prize by Desert's contest judges. Moore solved the problem of contrast by shooting from the shadowed side of the plants, underexposing his film, then overdeveloping the negative. He used a 4x5 B&D Press camera, 1/25 second at f32.

Mines and Mining

Silver Peak, Nevada . . .

Anaconda Copper Company has purchased more operating properties in the Silver Peak, Argentite, Palmetto and Lida camps. Bruhi Enterprises, headed by Avery Brundage of Chicago, received a reported \$3,500,000 from Anaconda for its several holdings in the rich silver-gold-lead region. Anaconda operates the Argentite, Mohawk and Nivloc silver-gold properties in the Silver Peak district, recently purchased the McNamara lead-silver mine in the Palmetto area and has leased the Wisconsin gold-lead-silver property at Lida.—*Pioche Record*.

Boulder City, Nevada . . .

Government officials and professional mining men watched with interest as the first flotation concentrates were produced in September by the 1200-ton manganese mill of Manganese, Inc. The mill—only one of its kind in the world—employs a flotation process developed by Manganese Inc. and Southwest Engineering Company of Los Angeles. Pilot plant work was done at the U. S. Bureau of Mines station in Boulder City and the process proved successful before construction of the multi-million dollar plant was started in May, 1951. After being ground, floated, calcined and nodulized to a metallurgical grade of 45 percent manganese or better, the product is being stockpiled near Henderson for eventual disposition by the General Services Administration. — *Humboldt Star*.

Reno, Nevada . . .

Copper Butte Mining Company has been cleaning out tunnels and making repairs on the Buckskin Mine in Mason Valley. N. L. Brown of Wabuska, manager of the project, reports 300,000 tons of copper sulphide have been blocked out, with assay running from two to 10 percent. A 50-ton mill is planned at the site.—*Territorial Enterprise*.

Austin, Nevada . . .

Big Creek Mining and Milling Company, which has been operating anti-mony property in the Austin area for 17 years, has purchased the old Clifton mill to process ore from its Big Creek Mine. The mill, which played an important part in Austin's activities many years ago, has not been operated for more than 15 years.—*Reese River Reveille*.

Wenden, Arizona . . .

Ground was broken in September for a \$150,000 government manganese ore crushing plant at Wenden. The plant, to be ready for operation December 1, is being built by the government to serve numerous small mines in the Wenden area, encouraging increased production of the vital mineral. —*Arizona Republic*.

Prescott, Arizona . . .

An \$18,000,000 expansion program has been started for the Eureka mining district of Western Yavapai county. Ernest B. Dickey, manager of the Bagdad Copper Corporation, said the value of copper, zinc and tungsten from Bagdad mines will be increased from \$6,200,000 during the past year to \$23,000,000 by 1954. — *Arizona Republic*.

Monticello, Utah . . .

Charles A. Steen, 32-year-old prospector, has reported discovery of a rich belt of pitchblende—a source of both uranium and radium—in the barren southwestern section of Utah. His find, he said, was made only 72 feet underground, nine miles south of La Sal, Utah, in uranium-rich San Juan county. Drilling a canyon rim for a previously-discovered deposit of carnotite, the prospector said he suddenly hit pitchblende. He reported the ore belt was eight feet deep and measured "better than .34 percent uranium oxide," with a core as rich as two percent uranium oxide. Pitchblende in commercial quantities has heretofore been found only in Canada and Africa, although scientists have suspected its presence on the Colorado Plateau.—*San Juan Record*.

Elko, Nevada . . .

Discovery of a deposit of commercial sulphur near Beowawe has been announced by Oscar J. Streeter and Pete Peterson of Elko. They already have uncovered about 400 tons of the mineral, and estimate the field contains 100,000 tons in all.—*Territorial Enterprise*.

San Bernardino, California . . .

The old United Tungsten mine in the Morongo mining district—last operated during World War I—has been reactivated by the Shooting Star Tungsten Company. Scheelite occurs in a contact zone between granite country rock and marbelized limestone. — *Pioche Record*.

Henderson, Nevada . . .

Titanium Metals Corporation of America has announced successful production of its first titanium ingots. Titanium sponge has been produced at Henderson since October, 1951, but until recently the sponge was shipped to New York for melting into ingots. Now the sponge is melted at Henderson facilities and the ingots sent east for finishing.—*Territorial Enterprise*.

Tonopah, Nevada . . .

Construction of the first new mining shaft in the Tonopah area in 35 years is being considered as the result of the recent ore strike at the old Summit King Mine. A mill also will be constructed at the site if operations yield enough commercial grade silver-gold ore to justify full-scale production. Although the vein narrowed to three feet after about 20 feet of drifting, values of about \$50 a ton held in the typical Tonopah ratio of 100 parts silver to one part gold.—*Humboldt Star*.

Moab, Utah . . .

To stimulate production of uranium ores in southeastern Utah, the Atomic Energy Commission will build a uranium ore buying and sampling plant at Elgin in Grand county, on the east bank of the Green River. The plant will have a 200-ton daily capacity. The site is served by the Rio Grande railroad and is at the junction of U. S. Highway 50 and State Highway 24.—*Mining Record*.

Austin, Nevada . . .

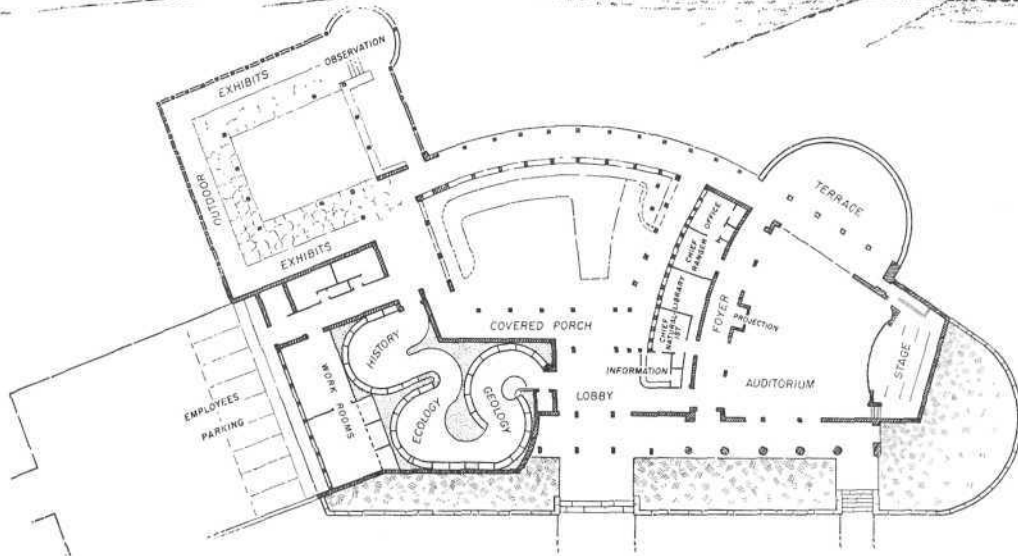
Allen Russell, who for a number of years has been conducting mining operations in Mill Canyon, has leased the turquoise mine of George McGinness. The property, located between Austin and Grass Valley, has been idle the past five years.—*Reese River Reveille*.

Globe, Arizona . . .

Hewitt Wolfe and associates of Globe have started a development program at the Starlight Mine in the Stanley Butte district of Graham county. Shipments of lead-zinc ore, about five tons weekly, are being made to the El Paso smelter.—*Humboldt Star*.

Fallon, Nevada . . .

Although minor installations and some finishing work remained, the Fallon fluorspar flotation mill of Kaiser Aluminum and Chemical Corporation began operation in September. The mill will handle about 100 tons a day, crushing and grinding the ore and separating ore from rock by flotation. It is located about a mile west of Fallon on the west bank of the river and along the north side of the Southern Pacific branch line.—*Fallon Standard*.



Death Valley's proposed museum. This sketch made by Norton Allen from preliminary plans drawn by the architectural office of the National Park Service. Building is estimated to cost more than \$100,000, using native materials as far as practicable.

Museum Funds

It is a thrilling opportunity that is presented to all of us to share in building a Death Valley Museum. This project is unique and inspiring. Here will be preserved relics and artifacts of a region and of history's pages which have no parallel. If sense of obligation to the pioneers is converted into tangible support, our state and nation will have a Museum that will be an inspiration to all the generations yet to come. Education will join hands with recreation in this project.

The Desert Magazine is to be commended for furthering this project. The Death Valley '49ers are likewise to be praised. If we can make a substantial beginning with private funds I am certain the U. S. Park Service cannot long deny us federal assistance. Promises of support should be sent to Mr. Arthur Walker, 2396 "D" Street, San Bernardino, California.

JOHN ANSON FORD

For Death Valley A MUSEUM

SPEAKING FOR the Death Valley 49ers, Ardis Walker, chairman of the organization, has announced that a wide open invitation is given this year to all persons who will find it possible to be in Death Valley during any part of the 4-day annual encampment scheduled for the Armistice Day weekend, November 8 to 11.

This will be the fourth annual encampment program of the 49ers, and the events tentatively scheduled include:

- 1—Campfire programs each evening, mostly musical.
- 2—Firearm exhibit at Furnace Creek ranch, Bob Ellithorpe, chairman.
- 3—Kodachrome exhibit, Floyd Evans, chairman.
- 4—Gem and mineral exhibit, Jim Nosser, chairman.

5—Art exhibit at Furnace Creek Inn, John Hilton, chairman.

6—Author's breakfast on Sunday morning and Artist's breakfast on Monday morning at the golf course.

7—Square dancing contests daily.

8—Sunrise services on Sunday morning, Dr. Albin Haag of the University of Redlands, pastor.

9—Burro Beauty Contest at Stovepipe Wells, Sunday at 2:00 p.m.

10—Special Armistice Day events on Tuesday, Legion posts participating.

11—Boy Scout Jamboree.

This year's Death Valley Encampment will have a double goal:

(1) To provide an interesting program of entertainment and ample camping facilities for the many thousands of visitors who are expected to attend the Encampment.

(Continued on next page)

THE *Desert* MAGAZINE CLOSE-UPS

"I came to California in 1928, and all I needed as inspiration to make tree study my hobby was a trip to Big Bear Lake and the discovery of my first Sugar Pine," writes Ruth Cooley Cater, author of "A Pinyon is Born," botany feature in this issue of *Desert Magazine*.

Mrs. Cater learned to love trees as a child in Trinidad, Colorado. The hills about Trinidad are covered with pinyons and junipers, and small trees always were finding their way into the Cooley yard. "Ours was a home of trees, shrubs and flowers planted by my father, who was never too tired to drive a horse and buggy many miles into the mountains to bring down a young pine or fir or spruce," she explains.

After 20 years of observation and study of trees and the publication of numerous magazine articles, Mrs. Cater decided to write a book about trees for the amateur nature lover. The re-

(2) To start the fund which is designed eventually to provide a museum for Death Valley. It is believed that if a substantial amount is raised through private channels, the National Park Service will be able to budget sufficient money to complete the project.

The 49ers have named John Anson Ford, Los Angeles county supervisor, to be chairman of a special committee to sponsor the museum project. Memberships in the Death Valley 49ers are available to the public on the following basis: Participating member \$1.00; Associate \$5.00; Patron \$10.00; Sponsor \$25.00; Life Member \$100.00.

In making contributions members may specify that their money be earmarked for museum purposes.

Superintendent T. R. Goodwin has stated that the Park Service already has collected a fine range of exhibits for the museum, the exhibition now being stored in the old CCC buildings near the Park headquarters.

Visitors planning to make the Death Valley motor trek this year should realize that the limited accommodations within the Monument will have been reserved long in advance, and that camping will be the only alternative for those who wish to remain in the valley overnight. Chairman Walker suggested that campers should bring their own wood and water, although water will be available at various places in the Monument.

sult was *Tree Trails and Hobbies*, published in 1950.

Her husband, George, has been a rockhound for years, and together they have followed hundreds of delightful trails—especially in California and Nevada — seeking desert rocks, trees, shrubs and flowers.

• • •

Johnson is a name which occurs frequently in Utah history books. Rufas D. Johnson, author of this month's prize-winning Life on the Desert story, was his father's 27th child. Many of his brothers, uncles and cousins played important roles in the early development of the Southwest.

"My father crossed the plains from Omaha as early as 1851," Johnson writes. "That first reconnaissance trip resulted, in 1860, in the migration of his entire family, bag and baggage, to the open plains of Utah. My mother, then about 19, walked most of the way carrying a baby in her arms. Reaching Southern Utah in the early '60s, Father became nurseryman, druggist, botanist and farmer at St. George and at the same time published a paper and maintained a store, lumber yard and boarding house at Silver Reef.

"In 1882 my father and his brother were called by Brigham Young to found a colony in northern Mexico. But when they arrived in Phoenix, they learned that the Yaquis and the Mexican government were at war, and the colony scheme collapsed.

"My father settled temporarily in Tempe, Arizona, and there I was born in October, only a short while after my mother had made that harrowing desert journey. Father died in December, and the family returned to St. George.

"For 25 years I was in charge of the street shade tree system in Salt Lake City. Now I have been retired, and the call of the desert land is too strong to resist. I am again back among the red hills of southern Utah, the dust of which I never really got from behind my ears. I have a tiny adobe pioneer house overlooking the valley of the Rio Virgen, with blue Pine Valley mountains on the north, the Shivwits plateau to the south and some of the peaks of Zion Canyon visible from my yard. A 90-year-old male mulberry tree with an 80-foot spread stands shady vigil over the little house. Here among my grapes and figs and flowers I find it beyond compare to have a spot in the desert land that I hope will be mine until the end."

• • •

E. A. Brininstool, author of "Desert Trek in 1904," came to Los Angeles from New York in 1895—and stayed. He was born in 1870 and, as a

youngster, was "crazy about Indians, guns and shooting." One of his first jobs was as inspector and tester of arms in an Eastern gun factory. He fired hundreds of shots daily, targeting each gun until it was pronounced perfect.

Brininstool joined the staff of the *Los Angeles Times* in June, 1900, as editorial paragrapher and special writer. Later he transferred to the *Examiner*, again doing special writing, then accepted an offer to do a special column of verse and paragraphs for the *Los Angeles Express*. He stayed with the *Express* for 11 years.

Meanwhile, he was writing historical articles about the West and the Indian wars for *Hunter-Trader-Trapper* magazine. Scores of these stories later were incorporated by the magazine into two books, *A Trooper with Custer* and *Fighting Red Cloud's Warriors*. Both books, now long out of print, had large and steady sales.

Dr. Grace Raymond Hebard of Wyoming University knew Brininstool's historical writings and invited him to collaborate with her on a history of the Bozeman Trail. After three years of research and writing, the book was published in 1921 in two large volumes.

In 1926, Gen. E. S. Godfrey of Custer's old 7th Cavalry appointed Brininstool a member of the national committee sponsoring the 50th anniversary celebration of the Custer fight. The event was held on the original battlefield, and more than 60,000 persons attended. Since then, the Custer story has become one of the most controversial in history, mainly because there were no survivors except the horse Comanche, ridden by Capt. Miles Keogh. Though wounded in seven places, Comanche recovered and lived to 28 years of age—a "ripe old age" for a horse.

Author Brininstool is of a "ripe old age" himself. At 82, he still plans "to keep right on hitting the typewriter for another bunch of years."

• • •

J. Wilson McKenney, one of the founders of *Desert Magazine*, and more recently a newspaper publisher and free lance writer, in September became editor of the CTA Journal, the monthly magazine of the California Teachers' Association, with offices in San Francisco.

Earlier this year Wilson assumed the position of Director of Publications and Press Relations for the CTA, and his elevation to the top editorial position on the magazine was a promotion to a post for which "Mac" is well qualified.

Here and There on the Desert

ARIZONA

Papago Leader Honored . . .

SELLS—Thomas Segundo, chairman of the Papago Tribal Council, has been named winner of the 1952 Indian achievement award annually presented by the Indian Council Fire. The Council Fire is a non-profit organization dedicated to improving the living conditions of the American Indians. Segundo has organized athletic and other recreational activities within the tribe, with a resultant decrease in juvenile delinquency, and, with other tribal leaders, has worked out a plan of rehabilitation for the drouth-stricken and poverty-ridden reservation.—*Arizona Republic*.

Show Low Dam a Gamble . . .

SHOW LOW—In an unprecedented plan to switch water from one watershed to another, work has begun on a million-dollar dam across Show Low Creek. Phelps Dodge Corporation is paying the bill on the project in hopes of gaining 5000 acre-feet of water annually for its mine works at Morenci. If precedent be the judge, the project is a million-dollar gamble. Less than 10 miles down Show Low Creek is the empty Lone Pine Dam, built in the '30s by the W.P.A., a stark monument to man's failure to put the creek to beneficial use. Lone Pine Dam filled just once before fissures in its bottom opened up allowing the water to escape. Innumerable efforts have since been made to plug the holes, but without success, and the dam is only good as a stock watering tank. If the new dam is successful — and engineering firms have staked their reputations on

favorable reports—the dam not only will solve Phelps Dodge's water problem but also will create a cold water lake which probably will be developed into a fishing and recreational area for Arizona sportsmen.—*Arizona Republic*.

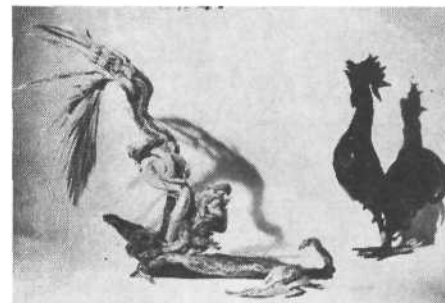
Bilingual Road Signs . . .

TUCSON—Anticipating greatly increased travel to Mexico with the opening in about 18 months of the new West Coast route from Nogales to Mexico City, the Arizona State Highway Department is installing bilingual road signs on the highway between Phoenix and Nogales. They are designed as a convenience and a safety factor both for Americans en route to Mexico and for Mexicans entering this country. There will be about 12 types of the signs including *escuela*, school; *alto*, stop, and speed limits measured in kilometers.—*Arizona Republic*.

Navajos Given Buffalo . . .

WINDOW ROCK—When Navajo tribal leaders discovered they would have to pay \$500 a piece for buffalos

for ceremonial use at their tribal fair, they decided they'd have to do without the symbolic beasts. These same animals which once roamed wild in the West just cost too much. Then Phillips Petroleum Company came to the rescue and shipped two of the buffalos free from their private herd to Window Rock. At the end of the fair, the buffalos—strong medicine to the Navajo—were slaughtered, and medicine men bid briskly for the hide and organs.—*New Mexican*.



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Duke's Research Laboratory

Box 666, Dept. B, Hot Springs, New Mexico

On Desert Trails With Everett Ruess

Everett Ruess dreamed of a wild carefree life in the far places of the earth where, unfettered by the petty restrictions of civilization, he could explore the unknown wilderness and paint and write as he roamed.

He lived with the Indians, he explored ancient cliff dwellings, disappeared in the desert wilderness for weeks at a time, and each time he returned to the haunts of men he wrote of his experiences.

IN 1934 HE DISAPPEARED

In November, 1934, he and his burros headed off into the red sandstone country of Southern Utah—and he has never been seen since then, and although there has been a widespread search for him, no clue has ever been unearthed to reveal his fate.

But in his diary, and the letters he wrote, he left a rich legacy for those who would find the peace and beauty in life.

All this material together with many of his block prints and sketches are included in **ON DESERT TRAILS WITH EVERETT RUESS**.

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Published by

THE *Desert* MAGAZINE

Palm Desert, California

THE DESERT TRADING POST

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MISCELLANEOUS

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DESERT QUIZ ANSWERS

Questions are on page 20

- 1—Wasatch Mountains are in Utah.
- 2—California.
- 3—Mullet.
- 4—Lumbering.
- 5—Hualpais.
- 6—Stone.
- 7—Malachite.
- 8—Flower.
- 9—Mormon pioneer.
- 10—Outpost on the Colorado River.
- 11—Author unknown.
- 12—Desert seeps and water courses.
- 13—Motorboat on Lake Mead.
- 14—Ehrenberg.
- 15—Saguaro.
- 16—Monument Valley.
- 17—San Francisco Peaks.
- 18—California.
- 19—Yucca roots.
- 20—Quartz.

Plan Crater Access Paving . . .

WINSLOW—Visitors who want to see Meteor Crater soon won't have to travel a rough, dusty road. The state highway department has announced plans for paving the five miles of approach road leading to the crater from the point where it branches off U. S. Highway 66 about 20 miles west of Winslow.—*Arizona Republic*.

Biggest Kaibab Hunt . . .

GRAND CANYON — The entire Grand Canyon National Game Preserve will be open during parts of October and November for the biggest Kaibab North deer hunt in history. The first section hunt was scheduled October 10 through 19; the second will begin October 24 and continue through November 9. Seven thousand hunters were expected to participate.—*Chandler Arizonan*.

Road Nears Completion . . .

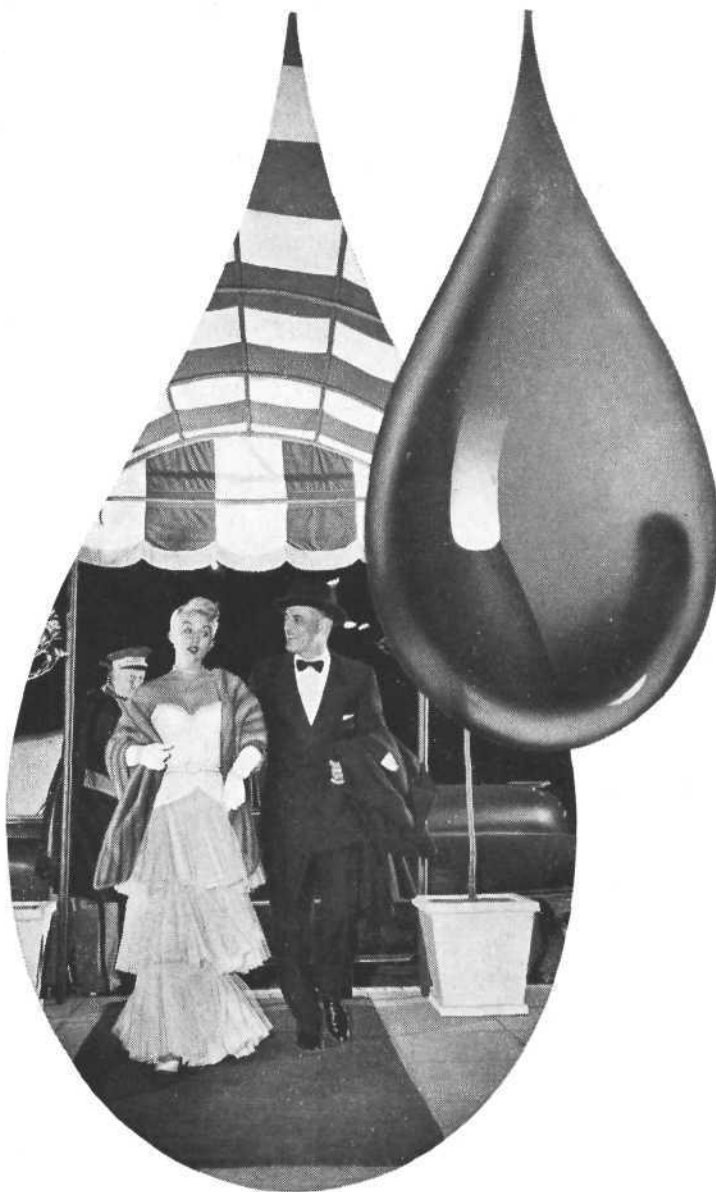
YUMA—Paving of the 128-mile road between San Luis and Sonoyta, Sonora, Mexico, should be completed within the next two years, according to reports received by the Yuma Chamber of Commerce. Although some work has been done on all sections, the road still is not a tourist road and is dangerous to travel now. When completed, the route will shorten by 46 miles the distance between Yuma and Rocky Point, an excellent fishing spot on the eastern side of the Gulf of California, and will bring the Pinacates, huge craters of extinct volcanoes a few miles below the border, within driving reach of American tourists.—*Arizona Republic*.

No Shooting on Reservation . . .

YUMA—As a result of several near tragedies involving hunters, the Quechan Tribal Council has announced that the Fort Yuma Indian Reservation is closed to hunting and shooting. All permits have been recalled.—*Arizona Republic*.

Navajos Now Accept Medicine . . .

GANADO — The Navajo people now accept medicine instead of the medicine man, Dr. W. D. Spining, director of Sage Memorial Hospital, told members of the board of national missions of the Presbyterian Church. "Reservation residents are vitally interested in the vaccination program," said Dr. Spining, "and they participate in the blood donor campaigns sponsored by the state department and other agencies." He lauded cooperation among government, mission and private doctors in providing specialized treatment at the hospital, but added that the shortage of nurses has cut down the hospital's capacity for inoculations and treatment of the sick.—*Arizona Republic*.



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CALIFORNIA

Fewer Dates This Year . . .

INDIO—The multi-million dollar Coachella Valley date harvest began in mid-September, about two weeks later than normal, with growers expecting to reach the harvest peak about October 20. The 1952 crop, estimated at 35,000,000 pounds total field run, will be less than normal. Some growers thinned their crops considerably this year and other gardens did not pollinate their dates because of low prices. Coachella Valley supplies about 95 percent of the dates produced in the United States. Small plantings in Imperial Valley and near Phoenix, Arizona, account for the remainder. — *Riverside Enterprise*.

Sea Holding Its Own . . .

INDIO—The Salton Sea is "holding its own," reported Hugh Galaher at a meeting of the Coachella Valley County Water District board. Galaher said there had been some recession in the sea's level and that it now stands at 238.4 feet below sea level, compared to a high level this year of 237.8 below. "There has been a gradual increase in the sea level for a number of years," he pointed out, "but this increase has been consistent although there was an abnormal rise last fall." That sudden rise resulted in \$492,500 in claims being filed against the board and the Imperial Irrigation district for damages to shore properties. Claimants held that the rise was due to the irrigation districts emptying waste water into the sea. — *Date Palm*.

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Cost of Desert Farms . . .

THERMAL—Transforming an acre of Coachella Valley desert into tillable land with irrigation facilities can cost as little as \$179.25—or as much as \$613.13. This is the finding of the Agricultural Extension Service after studying 11 land leveling operations involving 387 acres. Undeveloped desert costs from \$100 to 300 an acre. Brush removal, surveying and engineering, rough leveling and planning cost from \$55.25 to \$319.32 an acre. Adding from \$124 to \$249.81 for irrigation facilities rounded out the total cost. — *Riverside Enterprise*.

Plan Bigger Jeep Cavalcade . . .

CALEXICO—The 1953 De Anza Jeep Cavalcade will be greatly enlarged in scope than those of the past three years and will follow a route from Hemet to Calexico instead of terminating at Borrego Springs. Plans for the annual trek were to be discussed at an October meeting in Calexico of the Hemet and Calexico chambers of commerce and other sponsoring organizations. — *Riverside Enterprise*.

Meat Restrictions Lifted . . .

CALEXICO—Governmental importation restrictions on fresh meat have been partially lifted, allowing resident adults of the United States to bring up to five pounds of fresh meat into the country, duty free, for their personal use. — *Calexico Chronicle*.

Tribe Improves Palm Canyon . . .

PALM SPRINGS—The Agua Caliente Tribal Council expected to complete improvements in Palm and Andreas canyons by October 23, when the parks will be open for the tourist season, seven days a week from 9 a.m. to 6 p.m. Road improvement and new public rest rooms, benches and tables were planned. Admission price to the canyons will be increased this year to 50 cents for adults and 25 cents for children over six years of age. — *Desert Sun*.

Million Wetbacks Cross Line . . .

EL CENTRO—Federal immigration agents estimate more than 1,000,000 Mexicans crossed the border illegally in the past 12 months. During that period, 530,000 wetbacks were arrested, 275,000 of them in California. Health officials say the presence of the Mexican nationals is a serious threat to the health of the state's population. The death rate for diarrhea, enteritis and dysentery in the state is 1.8 per thousand; in Imperial county on the border it is 12.9 per thousand. California's death rate for babies under a year old is 28.6 per thousand; in Imperial county it is 56.2. Wetbacks also often are carriers of narcotics. — *Indio News*.

NEVADA

Delay Eviction Action . . .

CARSON CITY—At a meeting of Fish Lake Valley settlers and government officials involved in the land controversy concerning them, the Bureau of Land Management indicated it did not intend to press eviction notices filed with the 27 valley families, "at least for the time being." The settlers—who have no legal right to the unsurveyed land—had been told they must leave their farms so that millionaire rancher E. L. Cord could exercise a 10-year government grazing lease on the land.

Luther Hoffman, regional director of the B.L.M., said his office was willing "to try to work this matter out amicably by agreement." But he made it plain that the government regards the settlers as trespassers upon unsurveyed desert land and will not reconsider its eviction action—although actual serving of the notices has been delayed. Hoffman pointed out that the bureau had by every method at its disposal informed the settlers they could not gain possession of the 8000 acres of land they farm in the valley. He suggested they move to the upper end of the valley which has been opened to settlement; but spokesmen for the settlers replied that they considered the land they now occupy more suitable for farming and do not intend to leave it.

Studies of the valley's watershed area have indicated there is not sufficient water to irrigate the land occupied by the squatters in addition to land at the upper end of the valley which has already been opened to settlement.—*Battle Mountain Scout*.

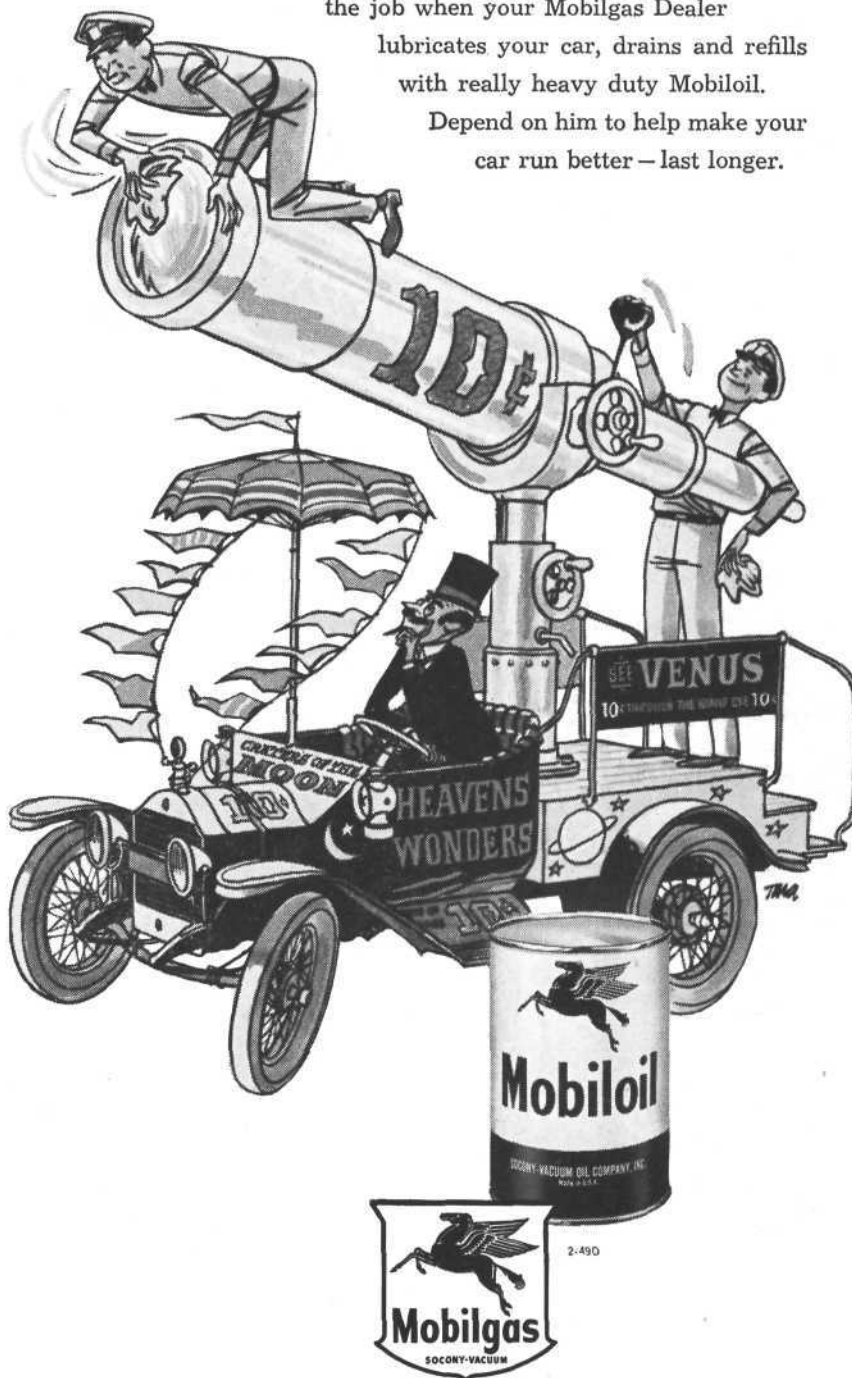
Daily Average Tops 1000 . . .

BOULDER CITY—Boosted by exceptionally heavy traffic during the summer months, the all-time daily average of visitors going through Hoover Dam on guided tours jumped over the 1000-per-day figure during August for the first time in history. Although the August total of 57,721 persons was below the July record of 58,927, it was enough to raise the all-time daily average from 995 last month to 1001 by September 1. — *Las Vegas Review-Journal*.

BOULDER CITY—E. A. Moritz, who retired as regional director of the Bureau of Reclamation September 1, will continue as that agency's representative on the city advisory council. Moritz' familiarity with municipal affairs in the dam community were considered too valuable to replace him on the board, E. G. Nielsen, new regional director, explained. — *Las Vegas Review-Journal*.

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Scotty Marks 80th Birthday . . .

DEATH VALLEY — His health greatly improved over a year ago, Death Valley Scotty observed his 80th birthday September 20 at his famous castle retreat in Grapevine Canyon. Born Walter Perry Scott in Cynthiana, Kentucky in 1872, Scotty first came to Death Valley in the '80s as water boy for a group of United States surveyors. As a young man, he joined Buffalo Bill's Wild West show and became one of the troupe's star cowboy performers, traveling all over the United States, Canada and Europe. In

1904 he met the late Albert M. Johnson, Chicago multi-millionaire, and the two came to Death Valley to build with Johnson's money the fabulous castle which now bears Scotty's name. —*Tonopah Times-Bonanza.*

Mapping Is Long, Costly Job . . .

ELY—"Nevada is one of the two states which do not have state-wide geological maps," Dr. Vernon E. Scheid, dean of the Mackay School of Mines, told a group of Ely mining men. To remedy the situation, the state mining bureau, in cooperation with the United States Geological Survey, is charting Nevada topography and surface geology in a series of county maps. When finished 10 or 12 years from now, these county units, produced at an approximate cost of \$20,000 each, will be combined by the U.S.G.S., and the first complete geological map of Nevada will be printed. —*Territorial Enterprise.*

Another Landmark Goes . . .

AUSTIN—Another historical landmark passed from the Austin scene when the last remains of the old wagon shop were removed by wrecking crews. The old building, one of the first erected in the mining camp, had fallen into serious disrepair several years ago, and there was no hope of bracing up or repairing the bulging walls. Last winter heavy snows crushed the roof, making complete removal necessary. Many of the relics from the wagon shop and the blacksmith shop formerly operated in the front part of the building will be preserved for display. —*Reese River Reveille.*

Highway 6 Now Coast to Coast . . .

AUSTIN—Highway 6—the short-cut route from East to West — was opened for travel early in September when barricades between Delta, Utah, and Ely, Nevada, were removed. With the completion of the last link in the Cape Cod-to-California arterial, residents of Austin were looking forward to increased tourist trade. The new route bypasses Salt Lake City, making a shortcut from Delta to Ely, thence over Highway 50 through Austin to San Francisco. —*Reese River Reveille.*

NEW MEXICO

Indian Vote Discounted . . .

SANTA FE—Just how widely will New Mexico Indians take part in the coming election? Secretary of State Beatrice B. Roach, whose office is the state's clearing house on election information, is not inclined to think the Indians will vote in any large numbers. Although registration forms give no information as to the voter's race, Secretary Roach estimates "less than 1500" Indians now are registered. "It is said the older Indians will not consider such action for themselves and try to discourage it on the part of the younger, more educated Indians," she explained. "On their reservations they still are not subject to property taxes and still not directly subject to state laws. They are said to fear that wide acceptance of the privilege of voting might result in their being saddled with more of the responsibilities of citizenship than they now have." The 1950 census listed New Mexico's Indian population at 41,901. —*New Mexican.*

Chukar Partridge Gaining . . .

WASHINGTON — Fish and Wildlife Service officials are encouraged by the headway the chukar partridge has made since 700 of the Turkish birds were planted last spring in Utah, Arizona and New Mexico. Nesting birds already have been reported in Utah. However, it will be another two years before it is known whether the birds will take hold and, even with success, it may be 15 or 20 years before sportsmen can hunt them. It took Nevada almost 25 years before it built up its population of Asiatic chukar enough to permit hunting. Additional plantings of the Turkish birds are planned in the same states next spring. —*New Mexican.*

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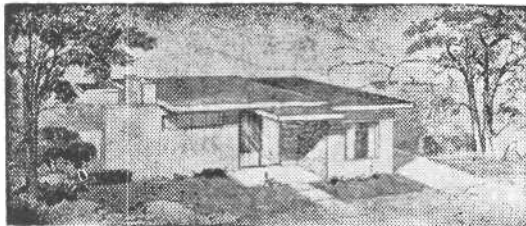
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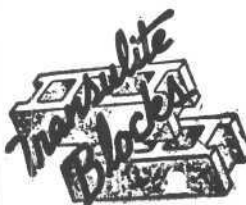
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BOX 5

Apaches \$288,600 Richer . . .

ALBUQUERQUE — Nearly 1000 Jicarilla Apaches, living on the tribal reservation just east of the gas and petroleum rich San Juan Basin of northwest New Mexico, recently received \$300 apiece for land leases. Charles L. Graves, area director for the U. S. Bureau of Indian Affairs, said the money — \$288,600 — came from oil and gas drilling firms which had taken leases on the reservation in hopes of developing new fields in the area.—*New Mexican*.

Rio Grande Improvement Begun . . .

SOCORRO — Second major contract in the program to provide an increased water supply for the drought-stricken Middle Rio Grande Valley was let in September. The contract calls for work to be performed along a stretch of the river extending north from San Marcial. Dikes, levees, drains, culverts and other works to control the stream flow will be constructed. When the \$18,000,000 program is completed, the water will be withdrawn from the ponds and lagoons, thus reducing heavy evaporation losses; ground water will drain into the channel instead of being consumed by plants; and the normal and low flows of the river will be directed into Elephant Butte reservoir instead of meandering through the salt cedars and cottonwoods.—*New Mexican*.

To Import Mexican Beef . . .

DEMING — About 500,000 head of Mexican cattle may be imported in the first 12 months after September 1, according to livestock economists from the United States Department of Agriculture. The quarantine against foot-and-mouth disease in Mexico was lifted September 1. Normally a large share of Mexican cattle move into the border states of Texas, New Mexico and Arizona. Most of New Mexico has received rains in mid-July, and pastures are improving. Arizona ranges are in good condition.—*Pioche Record*.

UTAH

Water Wastage Cited . . .

SALT LAKE CITY—Utah is wasting more currently-available water than it stands to gain from the Colorado River and other reclamation developments, Dr. Louis L. Madsen, president of Utah State Agricultural College, told members of the Utah Water Users Association. Dr. Madsen said Utah's total potential water supply is another 2,500,000 acre feet in addition to about 1,000,000 acre feet now being effectively used. With canal linings and better farm management, he believes Utah could add about 750,000 acres of irrigated land to the present 1,200,000 acres, permitting the state to support an ultimate population of 1,700,000 persons. "About 4,000,000 acre feet of water now is being diverted for irrigation," he said, "but half of it never reaches the farms and the other half is used at only 50 percent efficiency."—*Salt Lake Tribune*.

Indian Wars Vets Disband . . .

SALT LAKE CITY—United Indian War Veterans held their last convention September 12-13 in Long Beach, California. Past National Commander Herman E. Willmering, 67-year-old veteran who fought the Utes in 1906, said the organization had met since 1928 but "we have decided to disband because our members are dying too fast." Men who fought the Comanches, Kiowa, Pawnee, Cheyennes, Apaches, Utes and Sioux, Crows and Modocs nevertheless will elect national officers who will conduct business for the veterans until the last member dies. —*Salt Lake Tribune*.

Pony Express Memorial . . .

CEDAR CITY—Funds for the erection of a Pony Express Memorial in Washington, D. C., were collected in a state-wide campaign in Utah in September. The memorial, a bronze statue by Dr. Avard Fairbanks, will be a gift to the nation from the people of Utah in honor of the American postman. During the drive, horsemen simulating pony express riders were stationed in strategic spots throughout the state to deliver collected funds to campaign headquarters in several larger cities.—*Iron County Record*.



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For Army-Bound Indians . . .

MONTICELLO—Selective Service registration posts have been established at several places on the Navajo reservation in southeastern Utah for the convenience of 18-year-old Indians desiring to sign for army duty. Within the past two years, there has been a noticeable decline in registration, both on the reservation and outside in San Juan county. One reason for the decline is that few Navajo boys have the means of transportation to Monticello, where Selective Service headquarters are located. This new arrangement is intended to make registration more convenient.

According to A. J. Redd, chairman of the Monticello board, a tentative plan now is being worked out between the local board and state headquarters to take Indians into the army even though they speak no English or feign ignorance of English. According to this plan, they would be sent to an army training camp where Navajo servicemen who do understand the English language and the ways of army life will be retained to help in orienting the new inductees.—*San Juan Record*.

• • •

Utes Collect Judgment Funds . . .

VERNAL—Dust swirled high on reservation roads one evening in September as Ute Indians returned home with new cars and trucks loaded with bicycles for the children and mattresses and appliances for the home. Earlier that day, each Ute had received a \$545 government check—an average family totaling about \$2500—as interest on the \$32,000,000 judgment awarded the tribe for land seized by the government in 1880. Checks went to 1724 men, women and children. — *Vernal Express*.

• • •

Utah's Ducks Stricken . . .

OGDEN—Utah Fish and Game Department workers, aided by volunteer sportsmen, in September battled the most serious botulism epidemic to hit Great Salt Lakes marshland ducks in many years. Harmless botulism bacteria are present in virtually all soils, but when certain stagnant water conditions exist, they give off a toxin which is deadly to waterfowl. Sick birds are cured either by injections of antitoxin or by transporting them to fresh water. Since the game department's supply of antitoxin was exhausted almost immediately and none of the drug was available anywhere in the United States, the volunteer workers organized to carry the sick ducks to fresh water pools and burn the thousands already dead of the disease. — *Salt Lake Tribune*.

Gems and Minerals

ANOTHER TEXAS SHOW— AT AUSTIN IN NOVEMBER

Second annual show of Austin Gem and Mineral Society will be held November 22 and 23 at the Baker School, 39th and Avenue B, Austin, Texas. Committees are headed by W. L. Darnall, exhibits; W. N. Alexander, posters; Mrs. Emil E. Spillmann, publicity; and W. B. Helton, club exhibits.

JADE REALLY TWO MINERALS, CHINESE SPEAKER EXPLAINS

"Jade is really two minerals—jadeite and nephrite," Chang Wen Ti pointed out to members of Hollywood Lapidary Society at a recent meeting. According to Chang, nephrite first was discovered 5000 or 6000 years ago in Chinese Turkistan, now Sinkiang Province. Found in water-worn boulders, it was used in fashioning weapons and other implements. Jadeite, a later discovery, is found in good quality only in Burma.

"Nephrite, an amphibole, contains magnesium," explained the speaker, "whereas jadeite, which is a pyroxene, contains aluminum. The minerals differ in hardness and specific gravity, nephrite being lighter but tougher." He showed samples of both types.

Explaining how to determine the cutting quality of jade, Chang demonstrated how a slab may be struck to determine its tone, a good musical sound indicating a solid stone. The "mutton fat" white of nephrite is considered the best color of that mineral, whereas jadeite used for jewelry should be solid green. When carving, the cutter must study the changes in color and plan his design accordingly. One of the finished pieces displayed by Chang showed a green jadeite egg, open, inside which the artist had utilized a darker portion of the stone to carve the figure of a chicken.

ETIQUETTE OF VIEWING ROCK COLLECTIONS TOLD

In a past issue of the *Pick and Dop Stick*, bulletin of Chicago Rocks and Minerals Society, Stevens T. Norvell tells how to handle and look at gem and mineral specimens. "You do not have to drop a specimen to abuse it," he points out, and gives three rules to follow when inspecting a friend's collection or handling your own specimens:

"1—Never handle a specimen without its owner's permission. It will readily be granted when the owner sees that you are considerate enough to make the request.

"2—When permission has been granted, hold the specimen by its edges and never, never run your fingers over the polished faces or the natural prismatic and pyramidal faces. Not only do fingers leave an oil smear which collects dust, thus necessitating an extra cleaning operation, but dust sticking to the fingertips is an efficient abrasive causing irreparable damage.

"3—Use extreme care to avoid dropping a specimen or knocking it against some object. When you pick up a specimen by its edges with the fingers of one hand, hold the other hand immediately beneath it to form a cup to catch the specimen if it should drop. Of course, you don't expect to drop it, but it might slip. A little care will prevent such a slip from causing regrettable damage."

FIELD TRIPS, EXHIBITS PROMISED SHOW VISITORS

Two field trips are promised visitors to the Clark County Gem Collectors' show November 8 and 9 in the War Memorial and City Hall Building, Fifth and Stewart Streets, Las Vegas, Nevada. One will take gem and mineral collectors to the Dr. Park onyx beds; the other will lead amateur paleontologists to the Charleston Mountain marine fossil beds. In addition, an all-day picnic outing is planned for November 10—a no-collecting-allowed tour through Nevada's Valley of Fire.

This year's show is being dedicated to the memory of the late Dora E. Tucker, charter member of the group. Mrs. Tucker, an authority on desert wildflowers, was a *Desert Magazine* wildflower correspondent for several years. Her collection, including Indian artifacts, mineral specimens, gem stones and petrified woods, will be on display.

Other exhibit features include a collection of diamonds colored in the Cyclotron; the Barns collection of dinnerware made of Death Valley onyx; and fossils from Nevada, Wyoming and the Dakotas.

FAMOUS TEXAS PLUMES

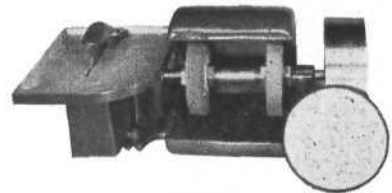
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Another procedure, used by Dr. Walter S. Palmer of the Mackay School of Mines, Reno, Nevada, consists of placing the sample on a piece of paper on a table. The prospector shakes the paper as he gently blows across it. The lighter material is wafted away.



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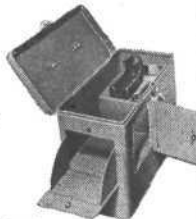
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AMONG THE ROCK HUNTERS

First fall trip of Fresno Gem and Mineral Society was taken in late September to the Nipomo agate field. Nipomo is famous for its beautiful sagenite agate specimens.

Kenneth Russell, president of the Marquette Geologists' Association, spoke on "The Geology of the Grand Coulee Region, Washington," at the first fall session of Chicago Rocks and Minerals Society. No formal exhibit was planned for the meeting, but members were invited to bring exceptional summer field trip finds.

Annual trading post picnic of Colorado Mineral Society was scheduled for September at Sloans Lake Park in Denver. Picnic lunch and afternoon games were planned in addition to the swap tables.

Geology, mineralogy, flora and fauna of the Mojave Desert-Death Valley region of California were described by Dr. P. A. Foster at a meeting of the Long Beach Mineral and Gem Society. He illustrated his talk with colored slides.

Jade, opal and petrified wood were featured in September by the Tacoma Agate Club, Tacoma, Washington. Jade and opal specimens were displayed at the month's first meeting, and petrified wood covered exhibit tables at the September 18 session.

Growing from 39 charter members in 1949, Compton Gem and Mineral Club now is near its constitutional limit of 150 members. The club celebrated its third birthday September 29.

Although few specimens were found, members of Delvers Gem and Mineral Society, Downey, California, enjoyed a field trip outing to the beach near Palo Verde Estates in Southern California.

"Oddities of California Geology" was York Mandra's topic when he spoke at the Northern California Mineral Society in San Francisco, California.

A "Rockhounds' Liars Contest" was planned as feature entertainment at the annual picnic of Dona Ana County Rockhound Club, Las Cruces, New Mexico. Each member told of some fabulous rock he had found, then passed the specimen around the group for inspection. Winner was Mrs. Bernice Sandell, whose "whopper" concerned a "petrified hummingbird egg." The specimen, suspiciously like an agate nodule, showed a yellow yolk in a half egg shell.

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After visiting Horse Canyon, California, where members found good specimens of plume, red and green moss agate, a field trip party from San Diego Lapidary Society stopped at Boron to search for petrified wood.

Mrs. Robert Boyler, in charge of the September lesson for the Thumb-nail group of Orange Belt Mineralogical Society, displayed copper sulphate crystal groups of different sizes. She explained how she had made them by suspending small particles of copper sulphate (bluestone) in a saturated solution of copper sulphate dissolved in water, and gave each attending member a sample for his collection.

Recent earthquake activity in California was discussed by Dr. Wright at a general meeting of San Fernando Valley Mineral and Gem Society. Afterwards, Mr. Lilleberg spoke on the theme stone of the month, petrified wood.

Mr. and Mrs. F. C. Quinn showed colored motion pictures of a vacation trip through New Mexico, Colorado, Wyoming and Utah when they were hosts to a supper meeting of El Paso Mineral and Gem Society.

The Ecuador earthquake of 1949 was described for members of the Southwest Mineralogists by that country's honorary consul, Henry Troya. Mr. Troya showed colored films of the quake, narrating scenes of interest.

September issue of *Rockhounds Call*, bulletin of Compton Gem and Mineral Club, suggested a cool summer field trip as relief from city heat. A mimeographed map directed members north from Compton, California, along the coast to Gaviota Beach, 30 miles west of Santa Barbara. "A walk along the beach will reward the searcher with large pieces of petrified whale bone. Black, gray, brown and red have been located, some in the whole vertebrae and some with the marrow showing. Smaller pieces can be found right on the beach and along the small creek that joins the ocean here," promised the bulletin's editor.

Robert Brewer visited the Canadian Rockies on a vacation trip this summer. He described his visits to the base metal mines in Canada at a meeting of the Mineralogical Society of Southern California. Members were asked to bring Canadian mineral specimens to the meeting in Pasadena, California.

"Glaciation in the High Sierra" was Dr. Gordon Oakeshott's scheduled talk for the August meeting of the Gem and Mineral Society of San Mateo County, California; but in view of the recent severe earth disturbances in Southern California, he devoted the main part of his talk to earthquakes, tracing causes and effects and outlining the history of major California tremors. The latter part of Dr. Oakeshott's talk pointed out that sharp peaks and U-shaped valleys are characteristic results of glaciation. A good example is Yosemite Valley, which was partially formed by water before the ice age. Slides illustrated both parts of the scientist's talk.

Fritz Wart will read from the Arizona Bureau of Mines *Bulletins and Field Tests* at monthly meetings of the mineral resources division of San Diego Mineral and Gem Society. The bulletins are written in as simple and non-technical language as the subject permits. Helen Wart discussed lead and its uses at the division's August meeting.

Gem section members of the Georgia Mineral Society visited the State Museum in Atlanta and heard Capt. Garland Peyton speak on gold coins and Gilbert W. Withers tell about Georgia gemstone localities.

Cedar City Rock Club invited the Salt Lake Mineralogy Society to join them on a week-end field trip. The clubs visited the Utah Construction Company blowout pile west of Cedar City, a nearby geode field and the mineral range near Milford.

"What Makes Gem Stones Valuable," was the question answered for Wasatch Gem Society when Dea Erickson appeared as guest speaker.

Pasadena Lapidary held its fourth annual show during September and October at the public library in Pasadena, California.

Complete statistics on garnet are given in one of the recent Dona Ana County Rockhound Club Bulletin's lesson outlines. A different gem is studied each month.

A huge, 229-carat diamond reportedly was found this summer near Rewa, central India. About the size of a pigeon's egg, the gem is believed to be the largest mined in India this century. The largest diamond ever found was the Cullinan which weighed 3025 carats when it was discovered in South Africa. It was cut into smaller diamonds. The Star of the South, found in Brazil, is said to be the largest single diamond now in existence. It weighed 261.88 carats uncut.

A two-day trip to San Benito County was mapped for September by the field trip chairman of East Bay Mineral Society, Oakland, California. Campers hoped to find specimens of actinolite, jasper, opal and fossil clams, oysters and sharks' teeth.

Monterey Bay Mineral Society was host at this year's inter-society Swap Day Picnic sponsored annually by the Mother Lode Mineralogical Society of Modesto, California. The event was held at the American Legion Park in Modesto. East Bay Mineral Society will be host for the 1953 picnic.

The San Diego Mineral and Gem Society resumed its lapidary and gemology classes early in September. The schools, taught by members, offer introductory instruction in gem cutting and polishing, and in mineral and gem identification.

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Aquamarine, Brazil	per gram	.05
Blue Topaz, Brazil	per gram	.05
Amethyst, Mex.	per gram	.05
Amethyst, Mex. (Cloudy)	per gram	.02
Turquoise, Miami, Ariz. (Large pieces, top blue color, very hard)	per gram	.08
Turquoise, Nevada (Nugget form)	per gm.	.04
Fire Opal in Matrix, Mex.	per piece	.25
Clear Opal in Matrix, Mex.	per piece	.15
Clear Opal, no Matrix	per gram	.05
Sunstone, Idaho	per gram	.10
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"We gathered obsidian nodules and Apache tears on Mineral Mountain, then paused to look across the desert valley at the panorama of Superior, Arizona, nestled at the base of the mountains a mile or so away."

Gems, Minerals and Mines Along Southwestern Trails

Claude A. Conlin, Jr., captain of photography and publicity in the Los Angeles Fire Department, and Charles Crosby, a fellow rockhound, covered 2006 miles of Southwest mineral country on a 14-day vacation trip last fall. This is the last in a series of three stories describing the roads Conlin and Crosby traveled, the places they visited, the mineral specimens and gem material they found.

By CLAUDE A. CONLIN, JR.

Photograph by the Author

CROSBY AND I left Crystal Cave with a feeling of satisfaction. We had explored a fascinating underground cavern which few other people have seen or will see.

On the road again, we headed back to Winkleman, north through Christmas and up to Dripping Springs Wash and the ranch of Cal Bywater, who operates a small gold mine in the Pinal Mountains.

Bywater was friendly and helpful in suggesting locations for us to visit. We decided to explore an abandoned vanadium mine within sight of his ranch. He provided us with carbide lamps and detailed instructions

on which drifts to avoid due to lack of timbering in potential cave-in areas. The half-day we spent at the mine produced some excellent vanadinite crystals.

Globe, Arizona, boasts many mineral collectors, but in our opinion two of the most enthusiastic are Mr. and Mrs. Fred Jones of 245 Hill Street. The Joneses have one of the finest mineral collections we've seen, including those on exhibit in museums. Crosby found Jones a trader after his own heart. My partner's facets won a quantity of fine chrysocolla, most of which comes from the Inspiration Mine at Miami.

We decided to follow Fred Jones' suggestion and backtrack to Superior, Arizona, for Apache tears. A dirt road along the east side of the Superior airport leads south to Mineral Mountain. Within a mile of the airport great outcroppings of perlite can be seen. Scattered in the region are hundreds of obsidian nodules varying from the size of a pea to three inches in diameter.

We gathered 150 pounds of nodules in an hour and carefully picked out some choice pieces of perlite with inclusions of Apache tears. There is evidence of the perlite having been mined on a small scale. We later learned a mining attempt had been made, but the operation proved unsuccessful. The perlite is of excellent commercial quality, but processing fuses the volcanic glass nodules and renders it useless.

We gave many of these nodules away during the rest of our journey. It always pleased us to see the interest people displayed when told what they were.

We started on the road again, heading

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east toward St. John, Arizona, where we hoped to find petrified wood. The center of information in St. John is Walt's Cafe, and the proprietor, Walter Pulsifer, can supply accurate information on where the best petrified wood sites are.

Following Walt's directions, we drove north out of St. John 4.8 miles, turned right on a dirt road and traveled .3 mile to a gate in a barbed wire fence, then continued for another 3.1 miles to the top of a yellow hill.

Looking southwest we surveyed a broad area of low blue and gray hills absolutely devoid of vegetation. We parked and started over and around the base of these hills. Bits of wood were in abundance, but they were badly broken up. After an hour-long search we stumbled upon a bonanza—a fallen tree limb approximately 8 inches in diameter and 20 feet long. It was broken into sections nearly 18 inches long. The bark was well defined, and the hard agatized interior has since yielded some handsome polished pieces strong in blood red and yellow. We packed it carefully in the car, then headed back to St. John, Concho and on to Flagstaff via Winslow.

That night, under a full moon, we slept in the Navajo Bridge observation shelter on the north bank of the Colorado River. We were up at dawn for the drive to Kanab, Utah—dinosaur country. But, after 11 days of perfect weather, thunder clouds were gathering, and a rising wind warned a storm was on its way. We continued as far as Mt. Carmel, Utah, but the weather became more discouraging, and we finally stopped one mile north of Mt. Carmel at Tom Blackburn's, the first ranch house on the left. Mrs. Blackburn cast an experienced eye upward and shook her head. She advised against our plan to make for Escalante and the surrounding country—which is rated just about tops for dinosaur bone specimens. Grudgingly we ceded to her judgment and decided to save that locale for another trip.

After an hour's visit with the Blackburns, commercial rock and mineral collectors, we did a little trading for Utah geodes and wood, then pushed south and drove through Zion Canyon in the late afternoon. We hiked to the Narrows to stretch our legs and improve our view of this fairy wonderland.

After stopping in St. George, we made camp 12 miles beyond Overton in Valley of the Fire. We spent the next day exploring the valley. Petrified wood is abundant, but it lacks color and is extremely cherty. We couldn't rock hunt here; the area is part of Boulder State Park, and the removal of wood is prohibited—a good law designed to protect the pleasures of everyone.

By 9 p.m. we were camped out of Jean, Nevada, for our last night under the stars. I watched them twinkle a long while, and

suddenly I felt a little sick as I realized the next day would put me back in Los Angeles, back in the wild scramble for civilization. I found myself comparing the existence of city dwellers with that of all the wonderful folks we had met on our desert journey. The comparison made me shudder, and I took a silent oath to break away from the city and really live on the desert.

As a point of interest to other amateurs: Crosby and I drove 2006 miles in 14 days. Total expense for gas, oil, food and entertainment was exactly \$106.86.

Every member of Everett Rock and Gem Club, Everett, Washington, was asked to bring to the September meeting prize specimens he had found on summer rockhunting trips. A swap table was planned for the trading of duplicates, and a Dutch auction was held for the benefit of the club treasury.

Raymond Addison of San Jose Lapidary Society displayed his cameos at the Compton Gem and Mineral Club show in Compton, California.

Norman Dawson discussed "Gems and their Formation" at a recent meeting of San Diego Mineral and Gem Society. Dawson told about pegmatite dikes which contain gems and explained that their brilliant coloring often is caused by metals like copper, aluminum and magnesium. Kunzite slabs, tourmaline and quartz crystals, varieties of beryl and specimens of copper in its many forms were displayed to illustrate specific points.

A technicolor tour of Europe and the Middle East was taken by members of Santa Monica Gemological Society when W. R. B. Osterholt, professor of geology at Santa Monica City College, showed colored slides at an evening meeting. Specimens of minerals used by skilled foreign stonemasons in constructing some of the finest of the world's buildings were on display.

Buzz Shields told members of Fresno Gem and Mineral Society about the revolutionary electric watch, designed in France and soon to be available in the United States. The watch is no larger than the conventional type; the main spring and balance wheel are eliminated, and the workings are powered by a battery unit weighing 1.8 grams. The watches are priced up to \$75, and each battery lasts about two years.

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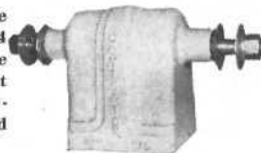
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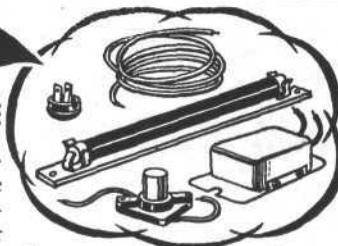
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C. L. Farrar used a Balopticon opaque projector to show geological slides to members of East Bay Mineral Society, Oakland, California. He took the pictures on a number of collecting trips to Colorado, New Mexico and Utah and explained the unusual rock formations they depicted. After Farrar's talk, several cabochons and slabs were projected on the machine.

"Gems of the Bible" was the topic J. E. Farr, president of the Earth Science Club of Northern Illinois, chose for his talk before members of Marquette Geologists Association, Chicago. Farr has made an extensive study of the use of precious stones chosen for sacred purposes, especially by the ancient Hebrews. He displayed his collection of cut and uncut specimens of the 12 gems which were set in the breastplate of the High Priest of Israel. These gems, described in Exodus XXVIII, 15-30, represented the 12 tribes of Israel and were emblematic of many things.

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"When examining various minerals, including scheelite, for possible fluorescence, make certain that the specimen is not coated with some material which might be opaque to ultraviolet light," warns George Roy in the September issue of *Desert Hobbyist*, bulletin of Shadow Mountain Gem and Mineral Society. Scheelite specimens sometimes are coated with limonite, calcite or other minerals which prevent fluorescence. For best results, test a freshly fractured surface. If still in doubt, acid treatment or mechanical cleaning is a good idea. A specimen long exposed on the surface may be heavily coated with a fine growth of moss or lichens which might interfere with normal fluorescence. Soaking in water and vigorous scrubbing will remove the organic matter.

Art Terry identifies gem materials by a unique method. He photographs specimens through a magnifying glass, then studies the colored slides for tell-tale inclusions. Terry showed his magnified photographs at a general meeting of Los Angeles Lapidary Society. By high magnification he was able to point out the three-phase inclusions identifying the emerald; and the tiny square crystal inclusions which differentiate the Columbian emerald from the tiny diamond-shaped inclusions of the Russian emerald.

Magnification brought out the elongated clusters of gas bubbles which identify synthetic crystals. The slides illustrated the fact that natural corundum always contains inclusions and "silk" — needle-like curved lines—while synthetics have no liquid inclusions but small tadpole-shaped bubbles instead.

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Techniques of manufacturing dishes on the lapidary wheel were discussed by Guest Speaker Dr. Helsey at a general meeting of San Jose Lapidary Society, San Jose, California.

All rockhounds probably are familiar with the fact that fossil imprints of plants and animals may be found in rock. Perhaps not so common is the knowledge that seaweeds make rock. Many seaweeds have a great capacity for extracting limestone from seawater, points out the *Earth Science News*, and depositing it as a shell-like crust encasing the plant. Such seaweed rocks are, in some cases, so much like coral as to be mistaken for that substance. Paleontologists have advanced the opinion that many of the massive rocks in the older strata of North America are of seaweed origin.

Dr. Lauren A. Wright, senior mining geologist with the California State Division of Mines, recently appeared as guest speaker for Glendale Lapidary and Gem Society. He discussed the geology of California as related to the occurrence of earthquakes.

Santa Fe Gem and Mineral Society, Santa Fe, New Mexico, held its first rock and mineral show in September.

Beryl was featured at the September meeting of the Gem Cutters Guild of Los Angeles. Arthur Terry showed colored slides of the mineral and displayed his personal collection of beryl specimens. A. C. Gustafson discussed the polishing of beryl and emeralds.

Learn Spanish if you plan to rockhunt in Mexico. This is the advice of Mr. and Mrs. J. G. Schnitzlein, who told fellow members of the Earth Science Club of Northern Illinois about their trip below the border.

At a late summer meeting of the Mineralogical Society of Arizona, Fred Bitner showed colored slides taken by his son Barclay on a tour through the Grand Teton, Yellowstone and Glacier Parks. Floyd Getsinger then projected a nature film recording the battle between a roadrunner and a rattlesnake. Finally, a cartoon was shown for the youngsters present.

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PALM DESERT, CALIFORNIA

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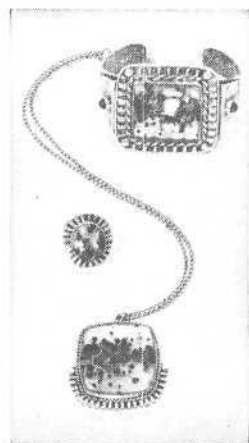
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Amateur Gem Cutter

By LELANDE QUICK, Editor of The Lapidary Journal

A provocative letter comes from Mildred Sanders of Mesilla Park, New Mexico.

She writes: "I believe you can give your readers an answer to a question which I would like very much to see discussed. When is it costume jewelry and when is it jewelry? It burns me to have someone call my topaz, sapphires, emeralds, peridots, garnets, etc. 'costume jewelry' in much the same tone of voice one would use in discussing something picked up at the 5 and 10 cent store. Any cutter has a healthy respect for a real gemstone of any sort. He knows the workmanship it represents, aside from the original value of the stone; the many hours of skilled, tedious, patient, careful labor. Is the product less valuable than the same stones displayed in the downtown jewelry shops?"

"The public needs to be instructed. For example: while in a place of business one day I noticed a saleslady admiring a pin I wore containing a stone I had cut myself. Having heard I was a rockhound she was unable to make up her mind about the brooch. She asked, 'is that a real gemstone in your pin or is it just a rock you have cut?' For the first time in my life I was completely at a loss for words.

"I have wondered if the attitude on the part of the public might be caused from our habit of placing our gems in cheap mountings. We have so many that we would like to wear and most of us cannot afford the kind of mountings our stones deserve, so we just stick them in any old thing in order that we may wear them and display our work. However, a good gemstone is lovely if only it is drilled and hung by a chain around the neck. In my opinion it is still a gem—not a costume piece."

Costume jewelry, in the trade, Mrs. Sanders, is generally considered those pieces made of plated silver or gold in which are mounted imitation stones, the pieces retailing at prices from a dollar to as much as fifty dollars. They could be the identical pattern but if they were sterling silver or gold and contained genuine gems they would be sold as jewelry.

We think a lot of the confusion in the minds of the public could be eliminated if the rockhounds themselves quit calling their gemstones rocks and referred to them always as precious stones, always remembering that there are no semi-precious stones. How can a stone be half precious? If a stone is valuable enough to be set in jewelry it is a precious stone. The term semi-precious is rapidly disappearing and it is now the custom in the jewelry trade to class all stones in two groups — diamonds and colored stones, all of them precious. Colored stones include all white stones other than diamonds, and the diamond classification includes all colors of diamonds.

Another wrong impression rockhounds often give the public is the loose use of the words gem and jewel. A gem is a precious stone until it is set in a mounting—then it is a jewel.

A great deal of the lack of appreciation of the public for the lapidary art and the jewelcraft of the hobbyists comes from the crude presentation of their work in some of their shows and by a severe lack of information in the exhibits, or a generous

amount of misinformation from the man behind the display case. These ears have heard some fantastic answers to the questions of the public at some of the shows we have attended. Another fault is that synthetic stones are always labeled as such in our shows but no one labels the true gems as genuine. Last year we attended a show where there was a magnificent case of faceted synthetic gems, so labeled, at which two elderly ladies were spending considerable time. We passed them a little later as they stood before another case. One of them became very excited and said, "Now look here Martha, this man has cut a real stone. See, it says 'genuine garnet from San Diego County.' Why, do you suppose they find real garnets in America?"

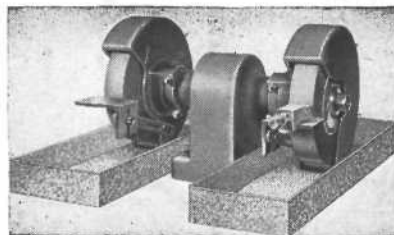
Almost any rockhound could have given those ladies a liberal education in five minutes and they would have loved it. You should see the attention and interest we get when we appear before women's clubs. We have a talk entitled "Fascinating Facts About Gems" we keep just for women's clubs. It's a subject that usually brings out a record attendance and it makes an easy talk because it is impossible to say anything in a talk to women about gems that is not fascinating to them. Henceforth the lecture will be at least five minutes longer for we have a hunch the ladies will all want to know more about the term "costume jewelry"; and thanks for the tip, Mrs. Sanders.

* * *

We took a dozen pieces of the "costume jewelry" of Willy Petersen-Fagerstam, Hollywood designer, on our eastern trip so that we could show the folks at the big rockhound gathering at Newark, New Jersey, just how lovely and original some of these agate pieces are. On Thursday night, October 16, *Desert Magazine* readers who live in the Atlanta area had an opportunity to see them too and we displayed our big half-pound opal.

Unfortunately this announcement is printed too late for many who probably would have come to hear our lecture at Emory University. The meeting was a special session called by the Gem Section of the Georgia Mineral Society. This society is one of the oldest mineral groups in America, having been founded February 11, 1935. It also is probably the largest club as its membership is over 300. When the lapidary interest became high the club was wise enough not to permit its membership to become depleted by the organization of another club sympathetic only to lapidary programs. Under the leadership of E. E. Joachim, long time Atlanta gem collector, the Gem Section was organized in 1948. It now has 125 members and is part of the Georgia Mineral Society. The Gem Section meets on the fourth Monday and the Mineral Section on the second Monday of each month in the Geology Building of Emory University. The society has long been noted for its professional rather than its amateur qualities. Its programs have always leaned to the scientific side and its officers have mainly been professors and mine operators. We feel highly complimented that this great group called a special meeting to hear our message on America's fastest growing hobby.

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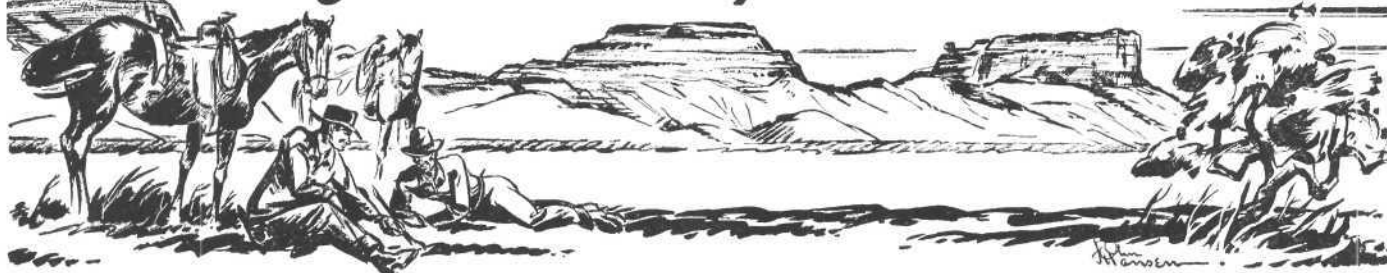
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Just Between You and Me



By RANDALL HENDERSON

THE MAIL bag which comes to my office every day brings some strange ideas. For instance, I just opened a letter from a concern which manufactures a liquid polish to put on the leaves of plants to make them shine.

Maybe that is a new idea which a desert editor wouldn't know about—having a house full of flowers with shiny leaves. But I guess it is all right, for folks who like 'em that way. As far as I am concerned I'll take my flowers, leaves and all, the way Nature made them. But I won't argue about it—at least not until some smart salesman comes along and tries to sell me a box of watercolors for giving a new tint to the blossoms of the verbena and the encelia. Yes, I am a bit old-fashioned about such things.

* * *

Another item in the day's mail is a newspaper clipping in which a writer for the Hearst publications expressed great indignation because 300,000 Indians in the United States will not vote at the election this year.

This writer blames the Indian Bureau in Washington for not advising the Indians regarding their rights in such states as Arizona and New Mexico where a supreme court decision has affirmed the right of the tribesman to vote.

What the writer fails to explain—perhaps because he does not know—is that on many of the reservations in the Southwest the tribal leaders have advised their people against exercising the citizenship rights to which they are entitled. What these leaders fear is that if the Indian assumes the role of a full-fledged American citizen he will also have to assume the tax obligations which go with citizenship.

Probably the tribal leaders are wise. If the Navajo reservation were parceled out to the families of the Navajo nation and placed on the state and county tax roles of Arizona and New Mexico, it is very likely that within a few years most of the reservation lands would have to be sold for delinquent taxes.

With some exceptions, the Indians are not ready yet to assume the obligations of citizenship. And until that time comes it is not to be expected that the tribesmen will have all the rights of citizenship—for in a democracy, citizenship involves obligations as well as rights.

* * *

The mail bag has brought many letters of protest against the action of the California department of fish and game in stating that there is no closed season on wild burros. The California commission sent out a news release which reads:

"The offspring of the dusty pack animals which helped the old-time prospectors write some of the most colorful pages of Western history are today providing rugged sport and good eating for a few venturesome hunters on the desert ranges of Southern California. . . . Besides provid-

ing the thrill of a first class chase, the wild burro's succulent flesh ranks with that of the better game animals."

It is true, as pointed out by the commission, that the wild burros are increasing in numbers. Eventually, they may become a threat to other forms of wildlife. But I cannot go along with the idea that shooting and eating them is the answer to the problem.

Burros are easily domesticated, and they thrive in the service of man. Hardly a week passes that I do not get a letter from somewhere in the West asking if it is possible to obtain a burro as a pet for the children.

If the California commission insists on having an open season for burros, I would like to suggest that the hunter's equipment be limited to a saddle horse and a lariat. If it is true that burros have become a nuisance on the range, I will guarantee through the columns of *Desert Magazine* to find homes for many hundreds of them—homes where they will have the best of care, and will pay for their board by rendering faithful service as beasts of burden and as pets.

Actually, the wild burro on the range is a cagey animal and it will take a good hand with the rope to capture him. As a witness to such a contest I'll confess I would be rooting for the burro.

* * *

During the second week in November, Cyria and I will be among the thousands of motorists who will attend the 4th annual encampment of the Death Valley 49ers in the Death Valley National Monument.

The program this year will extend over four days, November 8-11, with many exhibits and entertainment features to interest those who make the annual trek. For the information of those who have not been in Death Valley, I should mention the fact that lodging facilities are very limited, and such quarters as are available will have been reserved long before the dates of the encampment. But there is unlimited space on the floor of Death Valley for those who like to spread their bedrolls under the stars—and normally, the early November weather is favorable for camping out.

The Death Valley 49ers is a very informal organization. If you attend the annual encampment you may become a member by paying a fee of \$1.00 to the women who will have a little booth for that purpose at the Furnace Creek Ranch. If you subscribe to the idea that there should be a regional museum in Death Valley, then you will have a opportunity to contribute to that also.

It was gratifying to me to learn that John Anson Ford, supervisor in Los Angeles county, has accepted the chairmanship of the committee which will sponsor the museum in behalf of the 49er organization. For John Anson generally makes a success of whatever he undertakes. And Death Valley does need a museum.

Books of the Southwest

GLIMPSES OF LIFE SOUTH OF THE BORDER

From the press of the Union-Tribune Publishing company in San Diego has come *Mexican Vistas*, newest and one of the most informative books yet written about Mexico and its people.

James Clifford Safley, the author, is editor of the San Diego Union, and the book represents many years of close contact with the people of Mexico, both the high officials in government and the working people of the towns and farms.

While the author has given accurate glimpses of many phases of Mexican life, past and present, he has devoted extra detail to Baja California and the West Coast of Mexico, with which he is especially familiar.

Introduction to the book was written by Gen. Abelardo Rodriguez, former president of the Republic of Mexico. 206 pp. Map and halftone illustrations. \$3.75.

AUTHOR PROVES WESTERN FACT STRANGER THAN FICTION

According to Oren Arnold, the facts of Western history are wilder than any yarns the fictioneers can concoct. He proves it in his latest book, *Thunder in the Southwest*.

This is a collection of true stories about the early West. Some of the episodes are told in a few short paragraphs; others—like "The Stolen Sisters," the story of the Oatman massacre; "We Remember Pancho," about the notorious bandit, Pancho Villa, and "Doc and Kate, the First Stage Robbers"—comprise chapters. Drawings by Nick Eggenhofer illustrate many thrilling scenes.

In the harried times of the Western frontier, people could not pause to set down much about the events taking place around them, so many of the stories can never be documented. But the Southwest still is young, as Author Arnold found. "Since I began these tales in 1920," he reports, "I have talked to many of the actual participants. From them and from eyewitnesses I have obtained the wealth of detail, then put it together the way they liked to do."

The resulting anthology of anecdotes is highly dramatic, sometimes sensational and always good reading—an excellent blend of Western fact and folklore.

Published by the University of Oklahoma Press. 237 pages, \$3.75.

HUNTING PREDATORS WITH WITS AND HOUNDS

Slash Ranch, center of the Dub Evans cattle interests, is in the heart of some of the best lion- and bear-hunting country in the Southwest. Bordered on three sides by the great Gila wilderness and touching such wild, rugged country as the Mongolian Mountains, the Black Range and the east and middle forks of the Gila River, it is the home of many predators whose removal requires skillful hunting.

Dub Evans' hounds play a large part in running down the killer animals—bears, bobcats, mountain lions, wolves—which endanger livestock and game. "There are dogs, and there are hounds; but at the very top of dogdom are those lion- and bear-hunting Evans hounds, down on the Slash."

Here is the miracle of hound sagacity as pitted against the mystery of scent, told by a master hunter and a master observer. Dub Evans' *Slash Ranch Hounds* is a book which should be read by every hunter and dog lover; and for the student of the Southwest, it describes a wilderness area unexcelled for grandeur and scenic beauty.

Published by the University of New Mexico Press. 244 pages, halftone illustrations. \$4.50.

The Valley Called **DEATH**

Just as we were ready to leave, we took off our hats, and overlooking the scene of so much trial, suffering and death, spoke the thought uppermost, saying, "Goodbye Death Valley."

William Lewis Manly could never forget that scene in 1849 when the survivors of the Manly-Bennett-Arcane party bade bitter farewell to the terrible Valley of Death. Thirteen comrades remained behind in lonely desert graves.

Death Valley it still is called today. But now, in spite of the grim name, thousands of visitors flock each winter to this curious, beautiful land of sand dunes, history and wonderful landscapes.

For those who have never seen Death Valley, here are books which will open a vast new country to visit someday. For those who already have traveled this incredible land, they will reveal new facts and legends about its history, its characters, its climate, geology, mineralogy, botany and animal life.

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DEATH VALLEY IN '49. William Lewis Manly's account of the Manly-Bennett-Arcane party's tragic trek. A vivid description—in plain, unvarnished words—of wagon-train life and of the desperate bravery and high courage of those immigrants who first blazed the Death Valley trail. 524 pages, illus., endmap, index. . . . \$6.50

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LOAFING ALONG DEATH VALLEY TRAILS. William Caruthers. Here is much information never before published about Death Valley Scotty, Shorty Harris, Indian George, Jacob Breyfogle and scores of other old-timers, prospectors, mule skinnners and frontiersmen who played leading roles in the early day drama of Death Valley. 184 pages, illustrations, index. . . \$3.85

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DEATH VALLEY AND ITS COUNTRY,
George Palmer Putnam. \$2.75

DEATH VALLEY, The Facts, W. A. Chalfant. . . . \$2.75

These three guide books will tell the Death Valley visitor about the history, geography, climate and water, mining, industry, geology, mineralogy, botany and animal life of the Death Valley country and its development as one of the most popular of America's winter playgrounds. The first two books listed include travel notes and logged motor tours; all three have maps.

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vast, mysterious reaches of the American Southwest.

So why not make Christmas shopping easy this year? Browse through this list of books and check those which should be on the shelf of your child or of some small friend or relative. The Desert Crafts Shop will mail your order to you—ready and waiting for gay paper and ribbon the minute the yuletide spirit strikes you. Or we'll wrap them for you, if you like.

For the Very Young

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✓ **COCKY.** Loyd Tireman. Saucy, strutting Cocky, rollicking little roadrunner, first frightens his neighbors with his long bill and queer running gait, then makes them laugh. But they learn to love and respect him after he kills the enemy rattlesnake in an exciting fight to the finish. Drawings by Ralph Douglass. **\$1.25**

✓ **ONE LITTLE INDIAN.** Grace and Carl Moon. This lovely story for very small children takes Ah-di, a Southwest Indian boy, from the early morning of his fourth birthday all through a wonderful day of surprises and presents. Simple sentences, large type and striking illustrations. **\$2.00**

✓ **3 TOES.** Loyd Tireman. "Yip, Yippy Yip, Yippy Yay, I'm a clever fellow, they say," sings Three-Toes the cunning coyote. Quiet as the shadow of a floating cloud, he gets around to gobbling Rancher Brown's dinner, tricking Towser the dog and sending Hop-A-Long jumping for shelter on his long jackrabbit legs. He'll keep young readers on pins and needles as he pops in and out of mischief in sunny Mesaland. Illustrated by Ralph Douglass. **\$1.25**

Read, Cut and Color

✓ **AMERICAN INDIAN READ & COLOR.** Coloring directions and an easy-to-read text direct young artists' crayons in these full-page drawings depicting phases of Southwest Indian life. Drawing by Eugene Bischoff, text by Kay Bischoff. Four booklets, 8½x11 inches: "Hopi and Zuni," "Pueblo," "Navajo," "Apache". Each **50c**

✓ **CUT AND COLOR.** "Learn while doing" is the theory behind Eugene and Kay Bischoff's two Cut and Color booklets. "American Indian Dances" and "Kachina Dolls" invite children to color outlined figures, then cut them out and fold bases for stand-up illustrations of Indian life. Color notes are given as well as general information on individual dancers and dolls. Paper-bound booklets, 8½x11 inches. Each **50c**

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✓ **LITTLE NAVAJO BLUEBIRD.** Ann Nolan Clark. Small girls especially will love Doli, their little Indian cousin from Southwest Mesaland. From the opening paragraph, when she peeps timidly from behind the folds of her mother's skirt, to the end, when she walks between her father and mother, proud in the knowledge of being a true Daughter of the People, Doli is a very real little girl. That her trail is the trail of thousands of her People in a new world gives this book its particular distinction. 143 pages, illustrations by Paul Lanz. **\$2.50**

✓ **PECOS BILL.** Dr. James Cloyd Bowman. Pecos Bill, fabled hero of the cattle country, is one of the best-loved legendary figures of American folk lore. Here is a delightfully illustrated volume of his marvelous exploits and deeds of daring. Drawings by Laura Bannon. 296 pages. **\$2.50**

✓ **THE TRADER'S CHILDREN.** While telling a good lively story, Laura Adams Arner presents an authentic picture of life in a desert country where sheep raising is almost the only occupation. The children who are the chief characters are real children, and the 15 photographs which illustrate the book were taken of them and of their Navajo friends. A delightful story told with warmth and understanding. 241 pages. **\$2.50**

For Junior Rockhounds

✓ **THE FIRST BOOK OF STONES.** M. B. Cormack, pictures by M. K. Scott. Written by an expert and full of good pictures which help to keep things clear, this book makes stone collecting easy for junior rockhounds. In a simple, step-by-step approach, it shows how to start a mineral collection, how to identify specimens through simple tests, how to arrange display boxes and labels, how to plan field trips. Fundamentals of geology and mineralogy are explained in non-technical language, and individual minerals are described in simple terms. 93 pages, index, profuse illustrations. **\$1.75**

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